

City of Fitchburg

Bicycle and Pedestrian Plan 2017

Adopted: March 28, 2017





City of Fitchburg

Bicycle and Pedestrian Plan 2017 Update

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... and the hundreds of Fitchburg residents who shared their experiences and guidance during the public outreach and engagement process.

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Executive Summary

A Walkable, Bikeable Fitchburg

Walking and bicycling are simple and sustainable forms of transportation that, when adequately accommodated, provide healthy, affordable, and enjoyable mobility options for people through a wide range of ages, abilities and incomes. Walkable, bikeable places are those that provide comfortable, interesting, and useful walking and bicycling routes and destinations.

The Fitchburg Bicycle and Pedestrian Plan - 2017 Update (also referred to as the Plan in this document) offers infrastructure and programming recommendations to improve walking and bicycling conditions in Fitchburg and make walking and riding a bicycle more convenient and enjoyable travel choices for people who live, work, and play in the city.

In 2008, the City of Fitchburg adopted its first Bicycle and Pedestrian Plan. The 2008 plan set in motion many of the improved facilities and initiatives existing today in Fitchburg. The Fitchburg Bicycle and Pedestrian Plan - 2017 Update will serve as a replacement and update to the 2008 plan.

What's in the Plan

This plan envisions a citywide pedestrian and bicycle network based on community guidance, network analysis, and best practices. This plan includes:

- An expanded bicycle network that addresses gaps and enhances connectivity with on- and off-street bikeways, taking into consideration commuter travel and priority transportation corridors, neighborhood recreational loops, and future recreational paths in rural areas of the city;
- Pedestrian improvements near schools, public transportation and community destinations to make it
 possible for children and people of all ages to safely walk to popular amenities;
- Guidance for policy and programming improvements including wayfinding, bicycle parking, and educational, encouragement, and enforcement programs;
- Identification of priority locations for corridor and intersection improvements;
- Recommended performance measures to help the city track progress during implementation.

Plan Organization

The Fitchburg Bicycle and Pedestrian Plan - 2017 Update is organized into the following chapters:

1. Approach

This plan is based on an Active Living approach that seeks to create conditions that invite more Fitchburg residents to walk or bicycle more often to meet their transportation, recreation, and mobility needs - connecting Fitchburg residents to schools, parks, commercial areas, employment centers, transit corridors, city services, and community gathering places through a network of reasonably direct, comfortable, and inviting routes. This chapter also outlines the community engagement approach taken during the planning process, as well as outlines the Major Goals of the plan.

2. Existing Conditions

A thorough review of existing conditions in Fitchburg was completed as an initial part of the Plan Update process. This review included examination of population and census data, current and future land uses, transportation and destination locations, as well as a review of existing and adopted plans that impact the future of bicycling and walking in Fitchburg.

3. Network Recommendations

This chapter presents the recommended bicycle network and pedestrian improvements, and explains the methodology and facility types used to propose route network recommendations for bicycling and walking in Fitchburg.

4. Program and Operations Recommendations

Infrastructure and facility improvements are supported and implemented through recommendations related to programs, operations, maintenance, and continued community engagement. This chapter explains these recommendations as well as recommendations related to policy, wayfinding, and bicycle parking.

5. Implementation

Specific guidance is given in this chapter related to implementation of the network and program recommendations. This chapter also provides a table outlining all of the program recommendations described in chapter 4, along with evaluation programs described in chapter 5 matched with anticipated outcomes, timelines, and responsible agencies.

Appendices

The Appendices contain supplemental information and documentation to be used as reference for users of the Plan Update. The Appendices contain an Infrastructure Toolkit (detailed guide to specific facilities), Facility Cost Estimates, and a Supplemental Community Engagement Summary.

Goals for the Plan Update

Recommendations are guided by the following major goals, which were developed through the Plan Update process:

Expand Options

- Create a plan that makes walking and bicycling an option for more residents, workers, and visitors
- Use a multi-faceted approach, including a variety of facility options and program recommendations, to provide safe, comfortable, and inviting places to walk and bicycle

Connect

- Connect to regional trails network and neighboring communities
- Improve walking and bicycling connections to public transportation and to destinations in the city

Improve Networks and Intersections

 Improve the existing bicycle and pedestrian network, and improve key intersections to increase safety and comfort for people who walk or bicycle in the city

Invest

• Continue to invest in the amenities and enhancements that support a walkable and bikeable city

Engage

 Strengthen, enhance, and promote education and encouragement activities through local engagement with residents, businesses, employers and city employees

What people want

Hundreds of Fitchburg residents shared experiences, ideas, and priorities for improving walking and bicycling conditions in the city. Their guidance was incorporated into this plan's network and programming recommendations.

This is what they said:

- Walking and riding a bicycle are valued activities in Fitchburg, and many residents are proud of the successes achieved over the last few years to create a community of active bicyclers and trail-users
- Closing network gaps for bicycling and walking are important
- Greater separation from motor vehicles for people walking and bicycling is desired
- Safety for pedestrians and bicycle riders at intersections is an existing concern
- Corridors with the most use are also those where safety is the biggest concern for pedestrians and bicycle riders
- Existing trees and landscape are highly valued in Fitchburg neighborhoods, especially in neighborhoods that have been established for many years

1. Approach

This chapter contains the following sections:

| 1.1 | Why Walking and Bicycling? | 2 |
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| 1.2 | Building a Plan for a Variety of Users | 5 |
| 1.3 | The 6 E's of Pedestrian and Bicycle Planning | 8 |
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1.1 – Why Walking and Bicycling?

Walking is a foundation for individuals' health, well-being, and sense of connection. Walking is free and accessible for people through the widest range of ages, income levels and physical abilities. It is the most basic form of transportation - at some point during every trip, everyone is a pedestrian. Like walking, bicycling offers mobility and connectivity at a relatively low cost for residents young and old alike.

Communities that provide safe, comfortable and convenient facilities for active transportation enjoy increased levels of health and equity, as more people are able to access school, transit, employment, services, recreation, and everyday needs.

A robust pedestrian and bicycle network in Fitchburg will support all people traveling within the city (including those who drive) by delivering the following benefits:

Safety

The pedestrian and bikeways system will improve safety by providing a more interconnected network with fewer gaps, more separation from motor vehicle traffic, and calmer streets.

Livability

Increasing transportation options will help achieve broader community goals including access to jobs, neighborhood schools, and services.

Mobility

Increased walking and bicycling options in Fitchburg will enhance mobility for people of all ages and abilities, allowing everyone to reach destinations throughout Fitchburg. These destinations include public transportation, schools, retail and commercial locations, parks, and community assets like libraries and community centers.

An Active Living approach

Health starts in the communities where we live, work, and play. The way communities are planned and designed plays a significant role in the physical, emotional, and financial well-being of community members. Active Living policies and initiatives seek to make physical activity (like walking or bicycling) a useful, easy, fun and normal part of everyday life for a community's residents.

Initiatives based on an Active Living approach are important for a community because they can:

- Improve physical and mental health
- Make walking and bicycling safer
- Bring people together to build safer, stronger communities
- Reduce traffic congestion, improve air quality, maximize green space, and reduce transportation costs for families
- Decrease the risk and severity of chronic disease and medical costs

Health

Active transportation options, like walking and bicycling, will provide an opportunity for residents to build physical activity into their daily lives. In general, communities with higher rates of walking and bicycling have higher rates of residents meeting weekly recommended physical activity levels and lower rates of obesity, diabetes, and other chronic health conditions.

Household and Community Prosperity

Walking and bicycling are affordable transportation options that reduce the cost of transportation for all. People who walk or bicycle for at least some of their trips are able to avoid some (and in some cases all) of the many costs associated with vehicle ownership and operation, freeing up budget for other necessities and luxuries.

Cleaner Air

When more people are able to walk, bicycle, or take transit to meet their transportation and mobility needs instead of driving, all residents will benefit from cleaner air and reductions in harmful pollutants caused by vehicle exhaust. The most harmful pollutants are emitted within minutes of starting a car. Short trips pollute more per mile and have a bigger negative impact on environmental and physical health than longer trips.

Recreation

According to a survey performed during the planning process for the City of Fitchburg Parks, Open Space, and Recreation Plan: 2015-2020, walking, hiking, jogging, and bicycling are among the top outdoor recreational uses or activities that interest and engage Fitchburg residents, especially those with families. The results from a survey performed during the planning process for the City of Fitchburg Bicycle and Pedestrian Plan - 2017 Update showed that Fitchburg residents identified conditions for walking and bicycling to connect to parks and trails as a top priority. Many said that they walk or bicycle recreationally four or more times per week during fair-weather months. A robust and connected network will continue to support recreational activities throughout the city.

Parking and Congestion Alleviation

Over 25% of trips in the U.S. are shorter than one mile. That's a 15 minute walk, or a 5 minute bicycle ride, an approachable distance for most people. Yet, as many as two thirds of those short trips are taken in private motorized vehicles. Fewer people driving also means less congestion on existing roadways, less demand for parking, less time and money spent waiting in traffic, and safer conditions for people who choose to walk or bicycle. A continued effort to provide options for people to walk and bicycle can help alleviate parking and traffic congestion.

Regional Economic Competitiveness

Communities with trails and other safe walking and bicycling infrastructure attract development, employment and tourism, and benefit from increased economic activity. Businesses that can be easily accessed by foot or bicycle are perceived as being more convenient, and can benefit from customers who have additional ways to access stores.

Replacing driving trips with walking and bicycling keeps more money in the local economy by not exporting it to purchase fuel. If each household in Fitchburg were able to buy two fewer gallons of gas each month at \$2.04/gallon (the cost of gas at the writing of this plan) by walking and bicycling more, they would save a combined \$522,305 a year that could be spent in the local economy.



1.2 - Building a Plan for a Variety of Users

The Fitchburg pedestrian and bicycle network aims to provide safe, comfortable, and inviting routes and places for walking and bicycling. Increased use will depend not only on improving the network for those currently walking and bicycling, but also on attracting new users (who may find the current system uncomfortable and therefore don't use it), especially for short trips. When evaluating implementation strategies, it is important to consider and understand general attitudes toward walking and bicycling, as well as address changing trends.

Attitudes Toward Walking and Bicycling

People have an increasing desire to live in places where they can comfortably walk or bicycle more often for recreation, health and fitness, or transportation. The Oregon Transportation Research and Education Consortium identified four general categories regarding attitudes and perceptions about bicycling. These categories are imprecise and fluid; someone might behave in a manner consistent with one category one day, and another the next based on purpose, who they are bicycling with, familiarity, or whim. As people gain experience bicycling, their attitudes and perceptions may also change. The quotes below were gathered directly from Fitchburg residents.

Strong and Fearless (about 1% of people)

"I am an advanced, confident rider who is comfortable riding in most traffic situations"

People in this group are undeterred by any roadway condition or design. They typically self-identify as bicyclists, and tend to wear specialized gear and ride high-performance bicycles. They often take the shortest route when bicycling for transportation, and seek challenges when bicycling recreationally. Separation from people walking is more important to these riders than separation from people driving. Their passion for bicycling can make them vocal advocates, but their bicycling experience differs from that of most people.

Enthusiastic and Confident (about 9% of people)

"As a bicycling enthusiast and regular rider, I use on-street lanes and off-street trails..."

People in this group are comfortable sharing the road with motor vehicle traffic, but they prefer bicycle lanes or other designated bikeways. They may go a little out of their way for a better bikeways. Bicycling is often an important part of their identity, and they will bicycle to maintain this status. They may wear clothing that works well for bicycling, but is also wearable as everyday clothing.

Interested But Concerned (about 53% of people)

"I could bicycle to work, but this intersection is uncomfortable"

This group represents the largest potential market for increases in ridership. People in this group prefer off-street paths, and may ride for transportation if bikeways feel safe. Comfortable

conditions while bicycling are a priority. Interested but concerned riders do not self-identify as bicyclists, and would not feel guilty if they never bicycled again. Many people in this group could easily become more or less active riders - a good network may bump them into the enthusiastic and confident group, while an incomplete network or a few bad experiences may push them into the not able or interested group.

Not Able or Interested (37% of people)

"I live too far away to bicycle or walk to destinations"

This group includes people who have no current interest in bicycling, or who are physically unable to bicycle. Some of this group could transition into the interested but concerned group if environmental or personal circumstances changed.

Changing Trends

Connecting walking, bicycling, and transit

Nearly every transit trip involves a walking trip at the beginning, end, or both. Improving bicycle access to transit stops and stations increases the number of people served by transit catchment areas.

Currently, the City of Fitchburg is serviced by City of Madison Metro Transit. There are a number of bus lines connecting residents and visitors from the northern portion of Fitchburg (Urban Service Area) to Madison. Metro Transit buses are equipped to carry two bicycles at a time, and strollers are allowed on the buses. The routes which service Fitchburg primarily travel along Verona Road, Fish Hatchery Road, East Cheryl Parkway, and Hwy 14. See Figure 2.2 on page 26 for a map of current Metro Transit service routes and stops.

Driving habits are changing

For nearly 45 years from 1960 onward, per capita vehicle-miles traveled (VMT) increased at a fairly steady rate. Then, in 2004, the predictably upward trend changed, as Americans started driving *less*. Initially, the reversing trend was hypothesized to be a consequence of higher gas prices and an economic downtown. However the trend has continued through the economic recovery.

Nationally, VMT per capita has declined 7.2 percent since its peak in 2004. In Wisconsin, VMT per capita declined 1.01% in the same period for all road types. VMT on all roadways in Dane County increased 1.02% between 2010 and 2014, keeping steady with a population increase of the same percentage over that period of time (Wisconsin Department of Transportation).

More people are walking and bicycling

National data trends reveal that people 34 and younger are more likely to choose modes other than driving, and are at least partially responsible for the decrease in per capita VMT. Between

2001 and 2009, the average number of vehicle miles traveled among people ages 16 to 34 decreased 23 percent for the United States. During the same time period, this age group made 24 percent more bicycling trips, 16 percent more walking trips, and 40 percent more trips on transit.

The recent focus on millennials has largely overshadowed another significant change in bicycling trends: bicycling rates among people 55 and up are soaring. New trips by seniors (ages 65 and above) account for 22 percent of the net increase in adult bicycling.

In addition, more people are bicycling wearing everyday clothing, and riding average bicycles - they bicycle because it fits into their lives. The demographics of people who bicycle are also beginning to better reflect the population as a whole, including increasing rates among non-white groups, women, and seniors. Women, who are underrepresented in bicycling, accounted for nearly half of new bicycle commuters since 2005.

People are using existing trail systems differently

The City of Fitchburg maintains over 45 miles of sidewalks and approximately 22 miles of shared-use paths and trails within the city. Major commuter paths include the Capital City State Trail, Military Ridge State Trail, the Southwest Path, Cannonball Path, and the Badger State Trail. The number of people using these trails both recreationally and for transportation purposes has increased over the last decade. See Figure 2.6 on page 31 for the Existing Pedestrian Network in Fitchburg.

The approach to pedestrian and bicycle planning is changing

Today, communities, cities, counties, and states are making a shift in the approach to pedestrian and bicycle planning. Planners and policy-makers are re-learning the importance of balancing the needs of all roadway users including people walking, bicycling, driving, and taking transit. Communities across the country are adopting pedestrian and bicycle plans, Safe Routes to School initiatives, and Complete and Living Streets policies - all of which work towards a common goal of making walking and bicycling better for people.

Planning and implementing networks that make walking and bicycling safe, convenient, and inviting encourage more people to try walking and bicycling. As more people walk and bicycle, use of (and demand for) quality infrastructure increases, fostering a community culture that encourages and accepts walking and bicycling as a normal, enjoyable part of everyday life.

Approach

1.3 – The 6 E's of Pedestrian and Bicycle Planning

One effective way of thinking about and implementing pedestrian and bicycle planning initiatives is to consider six categories that proposed interventions may fit into: Engineering, Education, Encouragement, Enforcement, Evaluation, and Equity - commonly known as the 6 E's.

About the 6 Es

Engineering

Engineering recommendations can be thought of as "onthe-ground" improvements. Engineering involves the planning, design, construction, and maintenance of infrastructure including roads, walkways, bikeways, intersection treatments, signage, and end-of-trip facilities.

Education

Education programs teach people about the benefits associated with walking and bicycling investments, about rules of the road, and how to access and use existing amenities. Education programs include pedestrian and bicycle safety trainings, promotional campaigns, and network maps.

Encouragement

Encouragement programs inspire more people to try walking or bicycling through fun and inviting activities including friendly competitions, incentive programs, inclusive group rides, and community-wide events like Open Streets.

Enforcement

Enforcement programs often include participation from local law enforcement with a focus on enforcing traffic safety laws like speed limits, parking regulations, and general roadway behavior.



Engineering includes on-the-ground improvements like walkways, bicycle lanes, and intersection improvements.



Events like PARKing Day can help encourage walking and bicycling trips, and educate people on the benefits of walking and bicycling investments. PARKing Day is a world-wide annual event which encourages people to creatively occupy a parking space for a day to raise awareness of how much public space is dedicated to vehicle storage in the urban realm.

Evaluation

Evaluation programs measure the success of investments at achieving desired outcomes. Evaluation takes place before and after programming and infrastructure improvements to establish a baseline and measure progress overtime. Examples of performance measures that may be evaluated include public perception, behavioral changes and modal shifts, and network safety.

Equity

Equity focuses on distributing facility and programming improvements fairly throughout a community to ensure that residents of all neighborhoods and population groups have equal access to high quality infrastructure and programs. Equity efforts include intentionally focusing engagement efforts to reach diverse populations, and equitably implementing infrastructure and programs throughout a community to overcome economic, geographic, social, and physical barriers to walking and bicycling.

1.4 - Community Engagement

Public outreach and engagement was conducted in coordination with the City of Fitchburg and its Bicycle and Pedestrian Advisory Committee (BPAC). BPAC is an ad-hoc committee appointed by Mayor Steve Arnold to advise and oversee the direction of the Fitchburg Bicycle and Pedestrian Plan - 2017 Update.

Using online and in-person methods, the project team connected with and listened to Fitchburg residents to receive comments and guidance about existing conditions, user routes, needs and destinations, and to help identify priorities for bicycling and walking. The goal of the community engagement process was to work directly with the public throughout the planning process to ensure that public concerns and aspirations are consistently understood and considered.

Supplemental records of community engagement efforts can be found in Appendix C - Supplemental Community Engagement Summary.

In-Person Engagement

Bicycle and Pedestrian Advisory Committee (BPAC)

The Bicycle and Pedestrian Advisory Committee (BPAC) is an ad-hoc committee of 14 people appointed by Mayor Steve Arnold to advise and oversee the direction of the Fitchburg Bicycle and Pedestrian Plan - 2017 Update. This committee was tasked with guiding the direction of the project, offering guidance for the plan recommendations and facilitating communication and engagement with community stakeholders.

Over the course of the planning process, BPAC met nine times to review materials or participate in audits. All BPAC meetings were open to the public.

See Appendix C for agendas and minutes of BPAC meetings.

Engagement by the Numbers

- 9 in-person events invited people to share experiences and ideas for improving walking and bicycling in the city
- Over 100 unique users logged into the interactive online map
- More than 190 map comments, including destinations, routes, barriers, and ideas shared in person and online
- 347 project surveys completed online

"Pop-Up" Workshops

Engagement for the plan included several "Pop-Up" workshops - mobile workshops that brought the project to places where people were already gathering. Pop-Ups are friendly and casual activities that include tools for direct participation and opportunities for participant comments. Pop-Up events were held to gather information regarding existing assets and priorities for the future of bicycling and walking in Fitchburg.

These events were coordinated and staffed by City staff and BPAC members. The consultant team provided print materials that were used as tools during these events. Events were held with a wide variety of Fitchburg residents, including Spanish-speaking residents (materials were translated by BPAC members), students, seniors and included the following:

- Bicycle for Boys and Girls Club Event
- Bicycle Week event at Aldo Leopold Elementary School
- Aldo Leopold Elementary Summer School Program
- Concerts at McKee Park

Public Open House/Workshop & Listening Sessions

Public Open House/Workshops and Listening Sessions provided an opportunity for members of the public to receive project information, express preferences, ask questions, and engage in discussion with other members of the public regarding issues of bicycling and walking in Fitchburg. Three Public Open House/ Workshops were held for this Plan Update as well as a special meeting on sidewalks, hosted by Mayor Steve Arnold:

- Open House Workshop #1, July 21st, 2016 McKee Farms Park
- Open House Workshop #2, September 22nd, 2016 Fire House No. 1
- Open House Workshop #3, December 15th, 2016 Council Chambers, City Hall
- Oct. 10th, 2016: Special Public Meeting RE: Sidewalks with Mayor Steve Arnold

Approach

Walk/Bicycle Audits

Walk or Bicycle Audits are a way to gather 'on-the-ground' observations by community members regarding the local conditions for walking or bicycling. A walk or bicycle audit involves planning a route beforehand, scheduling a time for a group of involved residents to meet, and taking a walk or bicycle ride together while making observations, stopping at specific locations to discuss pertinent issues, and reflecting afterwards on the experience. A walk audit and a separate bicycle audit were coordinated by the City of Fitchburg planning staff, along with the Bicycle and Pedestrian Advisory Committee.

- June 13th, 2016 Bicycle Audit: Dawley Conservancy Park, Badger State Trail, Seminole Highway, McKee Road, Longford Terrace, Capital City Trail
- July 11th, 2016 Walk Audit: North Fish Hatchery Road Neighborhood

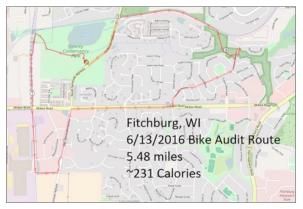
City Board/Commission Presentations

Drafts of the Plan Update were presented to a number of ad-hoc, advisory and City boards/committees, to solicit feedback. The following committees were presented the Draft Plan:

- Oct. 3rd, 2016: Board of Public Works
- Oct. 6th, 2016: Parks Commission
- Oct. 13th, 2016: Transportation and Transit Committee
- Oct. 18th, 2016: Plan Commission
- Oct. 27th, 2016: Community and Economic Development Authority

City Council Member Interviews

As a means to gather valuable input and feedback from City Council members on the Plan Update, all City council members were invited to be interviewed by the consultant team. The following questions were posed to the participating council members:



Map of Bicycle Audit.



Walk Audit form used with participants.

Approach

- How has the 2008 Bicycle and Pedestrian Plan served you and your constituents? What are some of the
 outcomes that you have seen as a result of this plan? What are some of the challenges that this plan has
 faced?
- What do you see as the biggest opportunity for this Plan Update?
- What are some goals/visions/priorities that you would like to be included in the Plan Update?
- What do you see as the biggest challenge or roadblock in your district to providing safe and accessible places to walk and bicycle?
- Which intersections or roads are the biggest priority to address, when trying to provide safe and accessible places to walk or bicycle?
- Other comments and thoughts?

Two City council members participated in the interviews for this planning process.

Plan Adoption

On January 17, 2017, the BPAC recommended a draft of the Plan to City Council for approval. At their January 24, 2017 meeting, the City Council referred the draft Plan to the Parks Commission (February 2), the Transportation and Transit Commission (February 20), Plan Commission (February 28), and the Public Safety and Human Services Committee (February 28). A public hearing for the Plan was held at the aforementioned Transportation and Transit Committee meeting on February 20. All of the aforementioned City bodies recommended approval of the Plan to the City Council. On February 28, 2017, the City Council directed staff to ensure the Plan was consistent with Resolution R-185-16, with said Resolution to also be included as an appendix to the Plan (Appendix D herein). The Council passed Resolution R-69-17 on March 28, 2017 (Appendix E herein), adopting the Plan and also amending a portion R-185-16.

Online Engagement

Project Website

A project website (www.fitchburgbicyclepedplan.org) was developed to gather and share information during the life of the project. The site included general project information, notices about in-person events, and online engagement opportunities including a public opinion survey, interactive map, general comments tool, and a place for people to sign up for project updates. Online materials were designed to closely match in-person activities. Online tools, including survey and an online interactive WikiMap, were launched May 27th, 2016. The public survey and interactive map were available for approximately two months, and were closed for public comment on August 1st.



A website was set up to share project information and host online tools.

Social Media

The City of Fitchburg used its social media channels (Facebook, Twitter, email list-serves) to promote the project, direct people to online tools, and announce public events.

Public Opinion Web Survey

A brief, voluntary survey was developed to gather specific information from individuals regarding their experiences walking and bicycling in Fitchburg. The survey was also used to identify barriers and opportunities for bicycling and walking.

Availability of the survey was noticed on the City's website, the City's TV station and in the Fitchburg Star newspaper, and to all City neighborhood association presidents, various city email listservs, and relevant city committees, boards, and commissions.

347 responses were received through the survey. Survey results can be found in Appendix C.

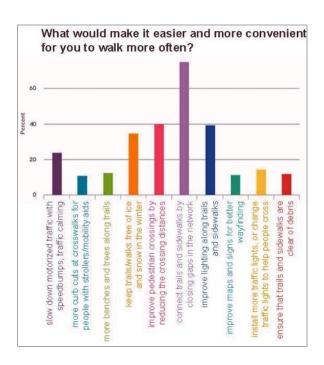
WikiMap

An online interactive WikiMap was developed to gather information on current and future walking and bicycling routes, popular destinations, and barriers to walking and bicycling. Participants were invited to share thoughts and ideas about specific locations throughout Fitchburg using the mapping platform.

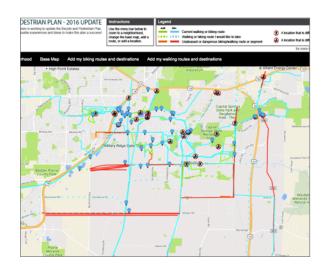
Availability of the WikiMap was noticed on the city's website, the City's TV station and in the Fitchburg Star newspaper, and provided to all City neighborhood association presidents, various city email listservs, and relevant city committees, boards, and commissions.

Figure 1.1 and 1.2 on the following pages show the results from the WikiMap entries. 190 responses were received through the map. The map, along with all of the submitted comments and ideas can be found here:

http://wikimapping.net/wikimap/fitchburg.html



Sample question and survey results from the web survey



People entered routes, barriers, destinations, and ideas using an interactive online WikiMap.

Figure I.I - WikiMap Feedback (Bicycle Network)

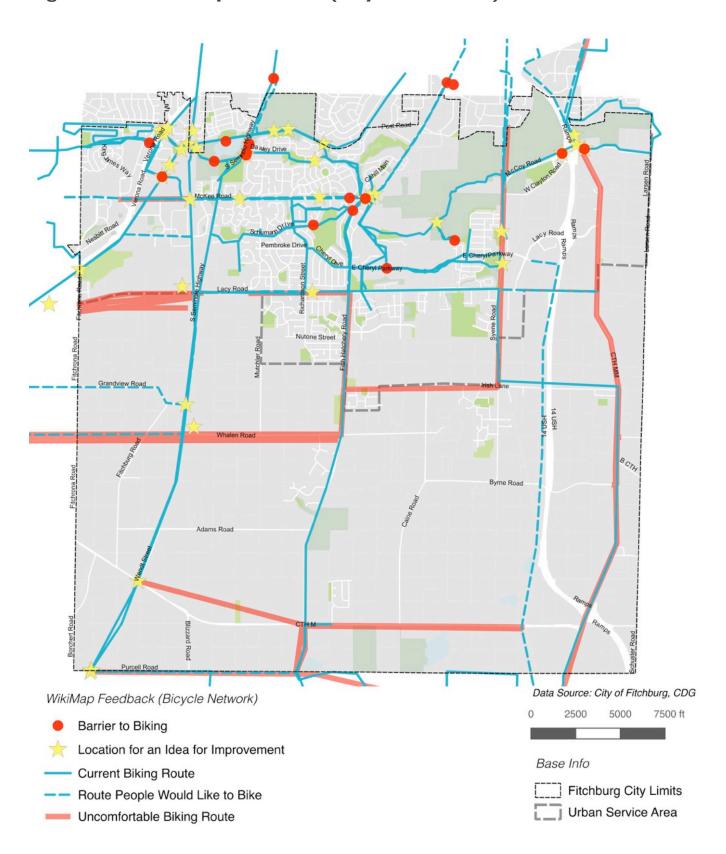
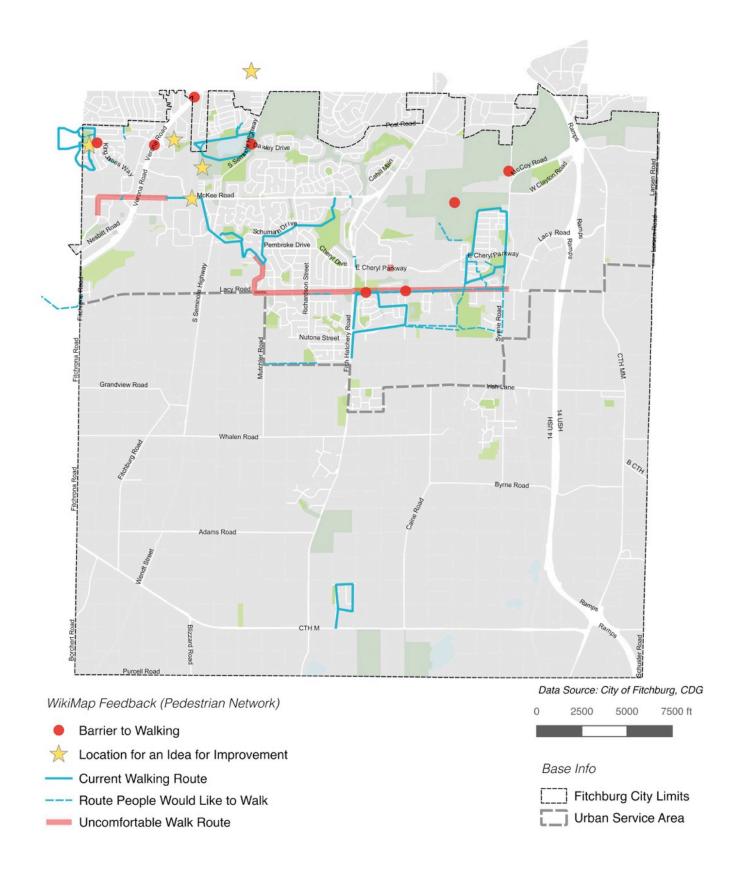


Figure 1.2 - WikiMap Feedback (Pedestrian Network)



Key Themes

Several key themes emerged over the course of community engagement and outreach efforts for the Plan Update:

- The most popular reasons for walking and bicycling in Fitchburg are for pleasure or exercise, and most people stated that they walk for this purpose two or more times per week.
- Walking to work, school, or to connect with public transportation is not a popular reason for Fitchburg residents to walk, with a majority of survey participants reporting that they never walk for these purposes. However, over half of participants reported bicycling beyond the city limits two or more times per week.
- A barrier to walking and bicycling identified by many residents is a lack of walkways or trails to the places where they would like to go.
- Corridors that raise the most safety concerns for bicyclists and pedestrians are also the same corridors that are used the most by bicyclists and pedestrians (such as McKee Road, Lacy Road, Fish Hatchery Road, Syene Road, CTH M, and Whalen Road).
- Residents who live in established neighborhoods where sidewalks do not currently
 exist have concerns that the construction of sidewalks will result in the destruction
 of mature street trees or disrupt the existing streetscape.
- Connecting gaps in the current bicycle and pedestrian network is of highest priority for most residents.
- A barrier for many people to walking and bicycling more often is the long distances between popular destinations, such as schools and places of work. Many people in Fitchburg commute outside of the city every day.
- Conditions for pedestrian connections to public transit are a priority, especially for people who are elderly or disabled.
- Some residents feel that there is already enough infrastructure and bicycle/ pedestrian facilities in Fitchburg.
- Many people feel unsafe crossing busy intersections, many of which are along McKee Road and Lacy Road.
- In general, the cross-city network of trails that run north-south are serving the recreational and commuter bicycling population well. However, east-west connections are more difficult and less frequent.

Approach

1.5 - Goals for the Plan Update

Recommendations are guided by the following major goals, which were developed through the Plan Update process:

Expand Options

- Create a plan that makes walking and bicycling an option for more residents, workers, and visitors
- Use a multi-faceted approach, including a variety of facility options and program recommendations, to provide safe, comfortable, and inviting places to walk and bicycle

Connect

- Connect to regional trails network and neighboring communities
- Improve walking and bicycling connections to public transportation and to destinations in the city

Improve Networks and Intersections

 Improve the existing bicycle and pedestrian network, and improve key intersections to increase safety and comfort for people who walk or bicycle in the city

Invest

• Continue to invest in the amenities and enhancements that support a walkable and bikeable city

Engage

 Strengthen, enhance, and promote education and encouragement activities through local engagement with residents, businesses, employers and city employees



Enable more students to walk and bicycle to school by focussing on improving connections to and near Fitchburg schools and other community destinations.



Attract new users to the network by prioritizing network safety and facility comfort.

2. Existing Conditions

This chapter contains the following sections:

| 2.1 | Fitchburg in Context | 20 |
|-----|--|----|
| 2.2 | Existing Bicycle and Pedestrian System | 29 |
| 2.3 | Existing and Concurrent Plans and Policies | 35 |

2.1 – Fitchburg in Context

Regional Context

The City of Fitchburg is located in Dane County, Wisconsin, directly south of the City of Madison. The city is included in the southern part of the Madison Metropolitan Statistical Area. It is bounded by the City of Verona to the west and the Village of Oregon to the south. At 35 square miles, Fitchburg has the largest area of any suburban municipality in the Madison area. The City's estimated 2015 population is 27,996 people. See Table 2.1 for Census Population Information for Fitchburg.



Entryway to Fitchburg.

Regional Corridors

Roadways

Principal arterials in Fitchburg include US Highways 14 and 18/151 (Beltline), and County Highway D (Fish Hatchery Road south of McKee Road) from the Beltline to McKee Road. These roadways are not under the jurisdiction of the City of Fitchburg.

Minor arterials in Fitchburg include a portion of County Highway D (Fish Hatchery Road north of McKee Road), County Highway PD (McKee Road), County Highway M, County Highway MM, Rimrock Road and McCoy Road.

Major collector roads include Lacy Road, South Syene Road, Seminole Highway, Irish Lane, and Whalen Road.

The roadway network follows a typical suburban development hierarchy: minor arterials (generally county roads spaced about every mile) provide automobile-oriented connections to commercial areas, employment centers, and other important destinations. Neighborhood streets provide limited connectivity within the larger grid - sometimes ending in cul-de-sacs or dead ends, and funneling traffic out onto high-speed, high-volume arterials.



Fitchburg is traversed by federal and state highways, as well as busy county roadways.



Regional bikeways including the Capital City Trail, the Badger State Trail and the Military Ridge Trail pass through the city.

Shared Use Trails and Paths

The City of Fitchburg is well-known throughout the region and the state for having a successful and growing bicycle and trail infrastructure. Several state bicycle corridors are located in Fitchburg. The Capital City Trail (17 miles total), runs east-west through the Urban Service Area of the north side of Fitchburg. The Military Ridge Trail (40 miles total) connects Fitchburg to the communities to the west, such as Verona, Mount Horeb, and Blue Mounds. The Badger State Trail (40 miles total) runs north-south through the western side of Fitchburg, connecting to Belleville, Monticello, Monroe and the Jane Adams State Trail (Illinois) to the south and Madison to the north.

These three state trails converge at the Dunn's Marsh Roundabout, also connecting to the Cannonball Path and City of Madison's Southwest Path. The Dawley Bicycle Hub, located east of the Roundabout, off of Seminole Highway, has a small parking lot for cars as well as a bicycle repair station, an informational kiosk, restroom facility, water-bottle filling station, and an observation deck. The observation deck offers views of Dunn's Marsh and the surrounding prairie.

Fitchburg also offers a number of shared use paths that connect pedestrians and bicyclists to the state trails, as well as to parks, schools, and other neighborhood and commercial destinations.

The City of Fitchburg is the recipient of the Bicycle Friendly Community Award, given by the League of American Bicyclists, with Silver Status for 2012-2019.

Development Patterns

The pattern of development in Fitchburg is characterized by urban development in the northern portion of the City (also known as the Urban Service Area, which is supplied with city water, fire hydrants, sewer and other urban services) and rural farmland and abundant open space in the southern portion. This pattern is likely to remain for a number of years, as the City is committed to maintaining a balance of rural and urban areas. A goal, as stated in the Comprehensive Plan, is to create "...highly intensive transit oriented neighborhoods and to improve the quality of older areas through maintenance and redevelopment, while maintaining the natural resources and high quality farmland that represent the history of the City." See Figure 2.1 for Existing Land Use in Fitchburg.

Future urban development areas are located adjacent to existing developed neighborhoods, and include the Northeast, North Stoner Prairie, McGaw Park North, and Uptown Neighborhoods, and Arrowhead, and Anton Drive areas.

Under a joint agreement between the City of Madison, Town of Madison, and the City of Fitchburg, two land areas currently in the Town of Madison are to become a part of Fitchburg by 2022 (or earlier).

Figure 2.1 - Existing Land Use in Fitchburg

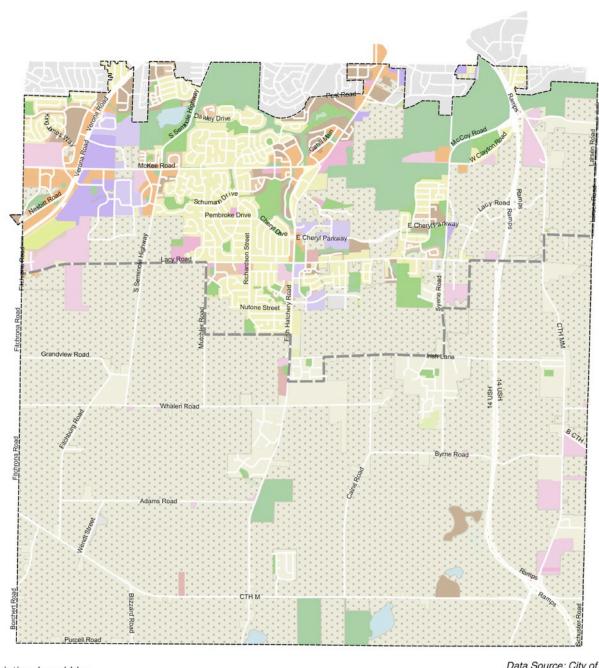




Table 2.1 – Fitchburg Population by Numbers

Census Population Information*

| Selected characteristic | Fitchburg | Dane County |
|---|-----------|----------------|
| Population | | |
| Population estimates, July 1, 2015 | 27,996 | 523,643 |
| Population, Census, April 1, 2010 | 25,163 | 488,075 |
| Population forecast, 2020, Dane County Economic Development** | 29,745 | 559,005 |
| Geography | | |
| Population per square mile, 2010 | 722.3 | 407.7 |
| Land area in square miles, 2010 | 34.97 | 1,197.24 |
| Age and Sex | | |
| Persons under 5 years, percent, April 1, 2010 | 8.0 | 6.2 |
| Persons under 18 years, percent, April 1, 2010 | 24.5 | 21.7 |
| Persons 65 years and over, percent, April 1, 2010 | 7.6 | 10.3 |
| Female persons, percent, April 1, 2010 | 48.4 | 50.5 |
| Race and Hispanic Origin | | |
| White alone, percent, April 1, 2010 | 72.2 | 84.7 |
| Black or African American alone, percent, April 1, 2010 | 10.4 | 5.2 |
| American Indian and Alaska Native alone, percent, April 1, 2010 | 0.4 | 0.4 |
| Asian alone, percent, April 1, 2010 | 4.9 | 4.7 |
| Two or More Races, percent, April 1, 2010 | 3.2 | 2.5 |
| Hispanic or Latino, percent, April 1, 2010 | 17.2 | 5.9 |
| White alone, not Hispanic or Latino, percent, April 1, 2010 | 65.1 | 81.9 |
| Population Characteristics | | |
| Veterans, 2010–2014 | 1,037 | 27,164 |
| Foreign born persons, percent, 2009–2013 | 16.9 | 8.0 |

| Selected characteristic | Fitchburg | Dane County |
|---|-----------|----------------|
| Housing | | |
| Housing units, April 1, 2010 | 10,668 | 216,022 |
| Owner-occupied housing unit rate, 2010–2014 | 50.3 | 58.8 |
| Median value of owner-occupied housing units, 2010–2014 | 268,500 | 229,000 |
| Median selected monthly owner costs -with a mortgage, 2010–2014 | 1,933 | 1,741 |
| Median selected monthly owner costs -without a mortgage, 2010–2014 | 751 | 665 |
| Median gross rent, 2010–2014 | 872 | 912 |
| Families and Living Arrangements | | |
| Households, 2010–2014 | 10,407 | 208,749 |
| Persons per household, 2010–2014 | 2.40 | 2.34 |
| Language other than English spoken at home, percent of persons age 5 plus | 23.3 | 11.8 |
| Commuting to Work** | | |
| Drove alone, percent | 75.5 | 72.6 |
| Carpooled, percent | 12.9 | 8.4 |
| Public Transit, percent | 3.4 | 5.3 |
| Walked, percent | 2.3 | 5.7 |
| Other means, percent | 0.3 | 0.3 |
| Worked at home, percent | 4.4 | 4.5 |
| Mean travel time to work (minutes), workers age 16 years+, 2010–2014 | 20.2 | 20.9 |
| Income and Poverty | | |
| Median household income (in 2014 dollars), 2010–2014 | 62,832 | 62,303 |
| Per capita income in past 12 months (in 2014 dollars), 2010–2014 | 34,836 | 33,895 |
| Persons in poverty, percent | 16.1 | 13.4 |

^{*} All Data from American Community Survey 2014 5-Year Estimate, unless otherwise noted

^{**} Data from Demographic Services Center, Wisconsin Dept. of Administration

Connections to Transit

Currently, the City of Fitchburg is serviced by City of Madison Metro Transit. Several bus lines connect residents and visitors from the northern portion of Fitchburg to the City of Madison. Metro Transit buses are equipped to carry two bicycles at a time, and strollers are allowed on the buses. The routes which service Fitchburg primarily travel along Verona Road, Fish Hatchery Road, King James Way, Red Arrow Trail, and Post Road. See Figure 2.2 on the following pages for Existing Metro Transit Routes and Stops.

Connections to Schools

Three school districts operate in Fitchburg, including Madison Metropolitan, Oregon and Verona Area school districts. Within the current city limits, there are two public schools (Savanna Oaks Middle School and Stoner Prairie Elementary School), which are a part of the Verona Area school district. Also located within the city limits is the EAGLE School, an independent K-8 school. Immediately adjacent to the Fitchburg city limits, located in the north Fish Hatchery Road area is Aldo Leopold Elementary School, a public school serving the Madison Metropolitan district. See Figure 2.3 on the following pages for Community Destinations and Walk Sheds, which include school locations in and near Fitchburg.

Connections to Parks and Trails/ Paths

The City of Fitchburg contains numerous parks and trails that provide recreational, fitness, and transportation opportunities to people walking and bicycling in the city. In total, there are over 720 acres of parks and open spaces, along with 18 acres of recreational trail corridors. These parks and open spaces include public parks, natural areas,

stormwater facilities, a golf course and a cemetery. Fitchburg parks and open spaces are overseen by the Fitchburg Parks, Recreation, and Forestry Department.

The following existing and potential future City park sites have been identified, per the Comprehensive Parks, Open Space, and Recreation Plan: 2015-2020, as Signature "Themed" Parks, with future development at each site to accentuate, where feasible, a specific park and outdoor recreation use "theme".

- McKee Farms Park
- Quarry Ridge Recreation Area
- Nine Springs Golf Course
- McGaw Park
- Dawley Conservancy
- Fitchburg Center
- North Stoner Prairie/Badger State Trail
- McCoy/West Clayton Open Space

Both Quarry Ridge Recreation Area and Dawley Conservancy have been designated with a biking theme.

The City is also in the early stages of exploring the concept of development of the Fitchburg Agriculture Route (FAR) along a 4.5-mile segment of the Badger State Trail, in the City's southern half. The FAR is envisioned as a "local food corridor," consisting of various land uses that support the local food system.

See Figure 2.4 on the following pages for Park Properties and Outdoor Recreational Facilities.

Figure 2.2 – Existing Metro Transit Routes and Stops

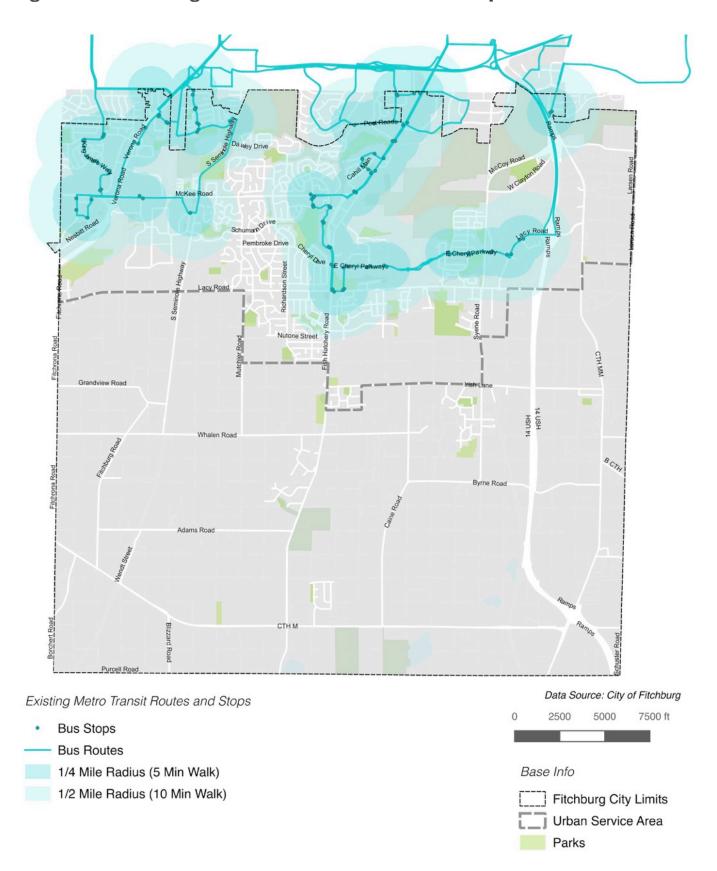
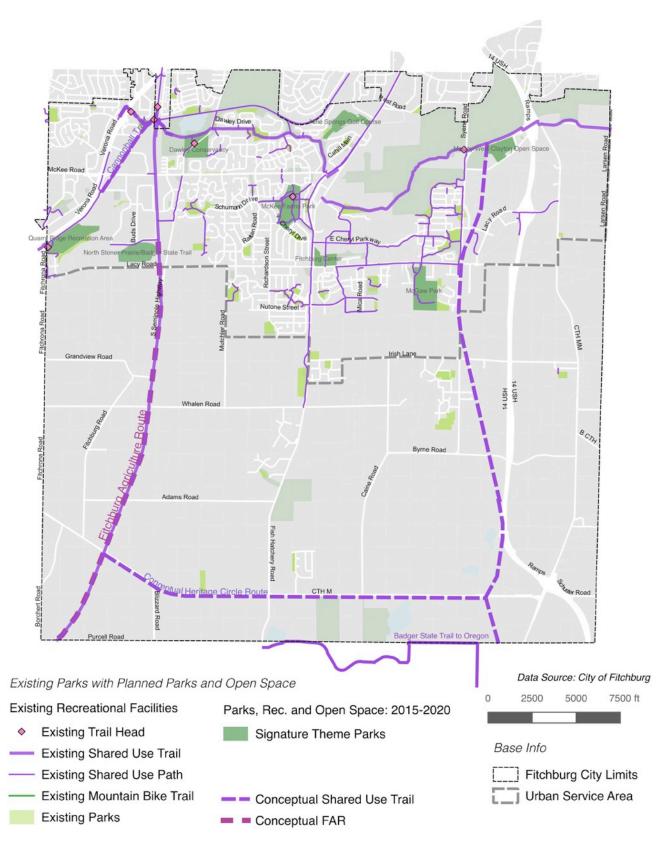






Figure 2.4 – Park Properties and Outdoor Recreational Facilities



2.2 – Existing Bicycle and Pedestrian System

Fitchburg's existing pedestrian and bicycle system provides a strong foundation for next steps of development for the city's network. (Currently, residents use shared use trails and paths for fitness and recreation, as well as to occasionally run errands to nearby commercial destinations.) By upgrading existing facilities, addressing gaps in the network, and paying close attention to the safety and comfort of pedestrians and bicyclists, Fitchburg can increase opportunities for more people to walk and bicycle more often for health, recreation, and transportation. See Figures 2.5 and 2.6 for the Existing Bicycle and Pedestrian Network.



Existing parks are an asset to walking and bicycling in the city.

Assets and Opportunities

Existing Walking and Bicycling Facilities

The existing facilities available to residents and visitors of Fitchburg already stands above most cities of this size. A dedicated effort over the last decade to improve sidewalks, bicycle lanes, improved shoulders, shared use trails and paths has laid the groundwork for a robust network. All new developments built and planned include considerations for bicyclists and pedestrians, and the existing road network in the Urban Service Area provides connections between neighborhoods.



The Capitol City State Trail allows access to walking and bicycling in the city.

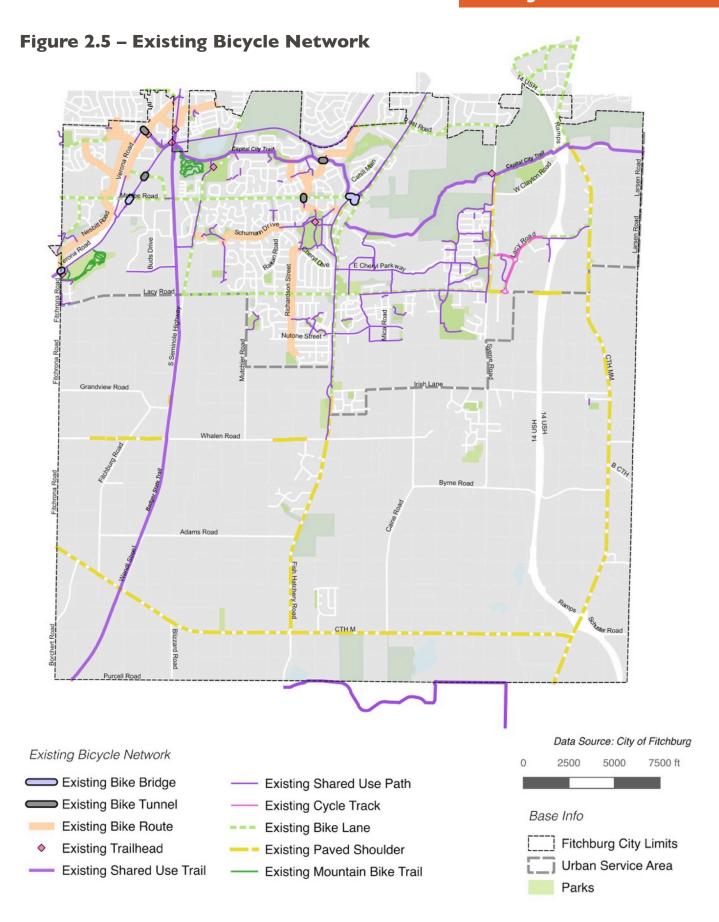
Active Community

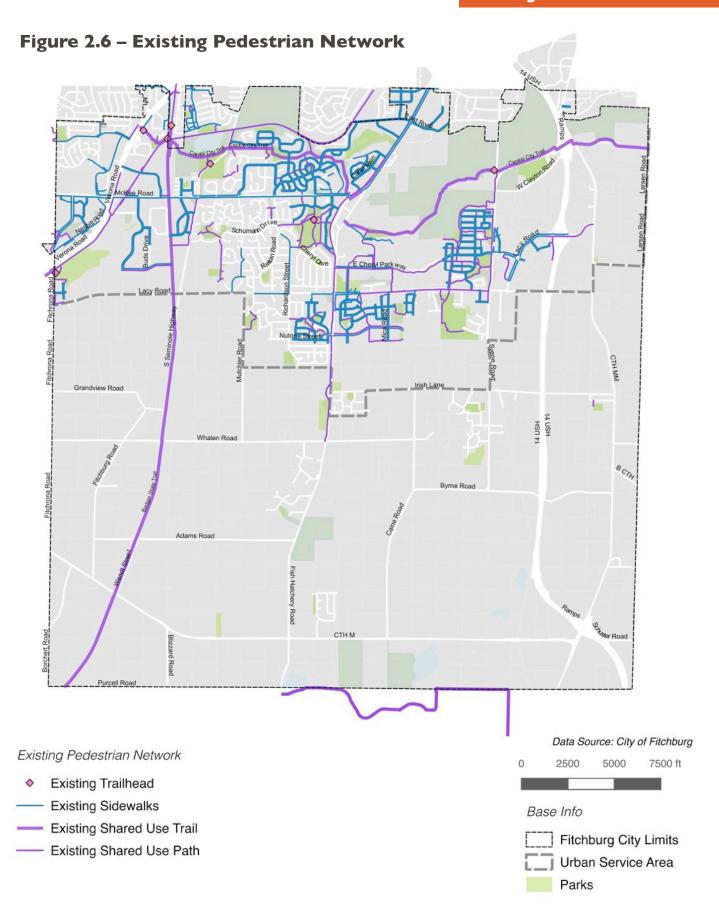
Fitchburg is home to a very active community of recreational and commuter bicyclists, as well as dedicated trail users. Many groups around the Madison area frequently organize group rides (Capital Brewery Bicycle Club, for example) and work to raise awareness for bicycling and pedestrian-related issues.

Additionally, Fitchburg is home to a number of bicyclerelated businesses, such as Fitchburg Cycles, DreamBicycles, Trail This, and Saris Cycling Group. These business owners actively support the movement towards Active Living and recreation through bicycling and walking.



Capital City Trail.





Existing Parks and Natural Areas

Fitchburg has a well-defined network of community, neighborhood, and area parks, all of which are designed to accommodate the existing population and needs, and look to the future for upgrades relating to population growth, ongoing maintenance, and accessibility. Of the activities performed in these parks, walking, hiking, jogging, and bicycling are among the most popular.

Natural and conservation areas owned both by the City and other entities, such as the Capital Springs State Recreation Area, Dawley Conservancy, and Dawley Park are connected to the existing trail network and provide opportunities for people to enjoy plants, water, wildlife and the outdoors while bicycling and walking.



Dawley Conservancy is an example of a City park that allows access to bicycling and walking.

Challenges

Distances to Important Destinations

Separated land uses are prevalent in Fitchburg. Many Fitchburg residents report living too far away from important destinations to be able to walk or bicycle for transportation, and many residents travel outside of Fitchburg for both work and school. However significant portions of Fitchburg's population *do* live within walking and bicycling distance of commercial, educational, and recreational destinations, as well as within walking distance of public transportation.

Safe, convenient, and enjoyable connections within neighborhoods and between destinations are one way to increase opportunities for walking and bicycling. Wayfinding, encouragement programs, and education initiatives are also effective tools for reshaping people's perceptions about what are reasonable lengths for walking or bicycling trips.

Limited Route Options

While the trail network in Fitchburg creates an unforgettable experience for recreational bicyclers and trail users, some of Fitchburg's community amenities are not well-connected to a bicycle or pedestrian network. Fitchburg's motor-vehicle roadway network provides connections between neighborhoods, and to connector roads. Short segments of shared use paths connect various neighborhoods to the trail systems, parks and to specific destinations. Although trails and paths are abundant, there are gaps in the system, and there is a general lack of circuits or smaller 'loops' for providing shorter routes for transportation and recreational uses within neighborhoods.

Generally, a well-gridded street network enables people walking or bicycling to choose lower-stress routes with relative ease by shifting to streets that parallel busy arterials. In Fitchburg, alternative options for well-connected routes are available, even though the roadway network is more suburban. Designating pedestrian

and bicycle routes through wayfinding, signage, and pavement markings within local, low traffic streets can be one effective way to mitigate connectivity limitations of neighborhoods, allowing people who are walking and bicycling to easily access community destinations with minimal interaction with motor-vehicle traffic.

Difficult Intersections

Fitchburg's arterial roads often provide the most direct routes from Point A to Point B, and connect the city's most important destinations. The majority of community destinations are located along McKee Road, Lacy Road, Fish Hatchery Road, and Verona Road. These important connections typically have long blocks with limited crossing opportunities for people walking and bicycling. When crossings do exist, they are often long (crossing several vehicle travel lanes and channelized right-turn lanes) and inconvenient (complicated signal timing with multiple turning phases with long wait times for people walking or bicycling). At a few crossings, the sidewalk network is broken, forcing pedestrians to share the road with motor vehicles, or proceed on paths that may not be accessible or safe for residents.

A number of separated-grade crossings have significantly improved the safety of many intersections in Fitchburg, however many of these are specific to the existing recreational trail system (for example the crossing of the Capital City Trail over Fish Hatchery Road).

An integrated public bus transit system relies on the ability for people to be able to safely cross roads, in order to reach bus stops. The public bus transit routes are primarily located on roads that are on major roads with higher traffic volumes which can pose safety issues for pedestrians and bicyclists. The crash data (Fig. 2.7) shows that most crashes between a motor vehicle and a pedestrian have occurred at these intersections.

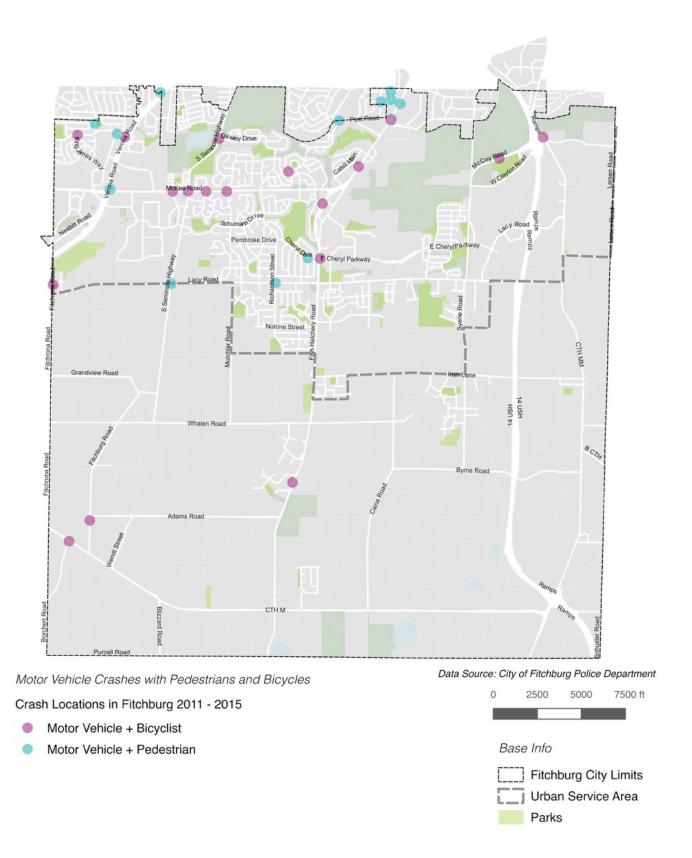


A bicycle crosswalk in Madison that provides riders with alternative routes.



Areas with heavy traffic and construction create barriers for bicycler riders and pedestrians.

Figure 2.7 - Motor Vehicle Crashes with Pedestrians and Bicycles



2.3 – Existing and Concurrent Plans and Policies

The following existing and concurrent plans were reviewed and referenced for the development of the Fitchburg Bicycle and Pedestrian Plan - 2017 Update.

Local Plans and Policies

City of Fitchburg 2008 Bicycle/Pedestrian Plan

The City of Fitchburg 2008 Bicycle/Pedestrian Plan has guided the last eight years of improvements and additions to bicycle and pedestrian facilities throughout the City. This document provides facility recommendations that were the state-of-the-practice for bicycle and pedestrian planning at the time it was written (and which continue to be useful today) including mid-block crossings, bump-outs, curb extensions, bicycle lanes and bicycle parking. It includes specific recommendations for improvements at intersections, for shared use paths, bicycle facilities and pedestrian facilities. Today, many new and innovative treatments for expanding access to bicycling, such as separated and buffered bicycle lanes, have now been introduced to many cities in the US under new national guidance available through AASHTO (American Association of State Highway and Transportation Officials) and NACTO (National Association of City Transportation Officials).

The 2008 document is split into two main sections. The first, titled Bicycle and Pedestrian Guidelines provide guidelines on how to make decisions regarding bicycle and pedestrian facilities in Fitchburg. The second section consists of specific recommendations for corridors and intersections.

As of 2016, nearly all of the recommendations regarding shared use paths have been constructed per this plan, as well as most of the on-road bicycle facilities. Paved shoulders, (4' width) have been installed along South Fish Hatchery Road and intermittently along Whalen Road, per the plan.

Resolution R-185-16 and Resolution R-69-17

On January 24, 2017 the Fitchburg Common Council adopted Resolution R-185-16 restricting installation of sidewalks and shared use paths in select existing City neighborhoods and residential areas, unless specific criteria are met. The Council passed Resolution R-69-17 on March 28, 2017, amending a portion R-185-16

Please see Appendix D and E of this Plan for R-185-16 and R-69-17 in their entirety.

City of Fitchburg Comprehensive Plan (2009)

The City of Fitchburg Comprehensive Plan was adopted in 2009, and has a number of amendments through 2015. The Transportation Element reviews the existing road networks and classifications, traffic counts, commute patterns, and specifies minimum right-of-way dimensions for roadways in Fitchburg, as well as examines rail and bus service. Analysis on Means of Transportation to Work shows that very few Fitchburg workers use public transportation or walk to work. The document projects that traffic congestion will increase on the arterial and major collector roadway corridors in Fitchburg.

Specific recommendations related to bicycle and pedestrian facilities include the following:

- All new land divisions along streets with urban cross sections should provide sidewalk on both sides of the street. (City Ordinance 93-0-23)
- The City should continue to implement its sidewalk installation policy by completing the sidewalks along retail commercial and other major traffic generators
- Reconstruction of Fish Hatchery Road, south of Lacy Road should be an urban section with bicycle lanes to Irish Lane (completed)
- Pedestrian ways of not less than ten feet in width may be required near the center
 and entirely across any block over nine hundred feet in length where deemed
 essential by the Plan Commission to provide adequate pedestrian circulation or
 access to schools, shopping centers, churches, or transportation facilities.
- Street reconstruction should include bicycle lanes on those streets designated as local collector streets. City bicycle routes should be linked with routes in the surrounding communities. Other collector streets not scheduled for reconstruction on the Bicycle Trail System should be striped for bicycle lanes. Parking may need to be restricted along narrower streets on the Bicycle Trail System.

City of Fitchburg Comprehensive Parks, Open Space and Recreation Plan: 2015-2020

The City of Fitchburg Comprehensive Parks, Open Space and Recreation Plan: 2015-2020 provides a vision and action items to achieve that vision for the City of Fitchburg parks, open space and recreation system. Community engagement completed during this plan included surveying residents regarding their priority activities in parks and open space throughout Fitchburg, and revealed that bicycling, walking, hiking, and jogging are some of the most popular recreational activities in the City.

The plan looks to the future by identifying proposed Signature "Themed" Parks, which are intended to focus on a few related uses and amenities, or "themes". The Dawley Conservancy and the Quarry Ridge Recreation Area have been identified as Signature Parks under a bicycling "theme".

Another key aspect of the Comprehensive Parks, Open Space and Recreation Plan include the Conceptual Park and Open Space Proposal, which identifies and prioritizes new or improved parks and open spaces throughout the rural areas. This proposal, originally developed in 2004, shows a potential network of linked parks and open spaces. The Heritage Circle Route, a 19-mile connected trail network encircling the City of Fitchburg, aligned with the Badger State Trail, CTH M, Syene Road and connecting to the Capital City Trail, is noted as a proposed trail for the future.

Fitchburg Agriculture Route (FAR) - Concept Analysis: 2017

The Fitchburg Agriculture Route (FAR) is a conceptual vision for the future of a 4.5 mile section of land surrounding the Badger State Trail. The FAR concept is an opportunity to create a "local food corridor", which is intended to drive social, economic and agriculture growth. The FAR proposes to use the Badger State Trail as a "unifying corridor" to encourage local food production, processing, and distribution.

The City has recently completed a FAR concept analysis, undertaking an initial exploration of potential opportunities for implementation of the FAR concept. Additionally, there have been recent discussions about improvements at the Old Fitchburg site, at the southern end of the FAR, to enhance the biking experience along the corridor.



Flyer for Fitchburg Agriculture Route group bicycle ride event.

Heritage Circle Route

The Heritage Circle Route is a conceptual 19-mile route, identified as a "major linear recreation path linkage that would provide a circular recreation path around the City of Fitchburg." The Route would give users an opportunity to pass through the varied cultural and natural terrain of Fitchburg. The City's circular symbolic seal, with its fish, oak trees, farms, industry and homes serves as a conceptual representation of the Route. The proposed Route consists of four segments. The north segment would utilize the Capital City Trail, the west segment the Badger State Trail, and the east segment within, or adjacent to, the former Chicago and Northwestern Railroad line. The south segment would require land acquisition, as it parallels County Highway M, until meeting the west segment. The Route concept recognizes the challenges that will need to be addressed, "given the desire and need to maintain rail presence" through the corridor and the adjacent land uses, including the Oakhill Correctional Institution. The City has recently begun various initiatives on the Badger State Trail segment of the Heritage Circle Route, including the aforementioned Fitchburg Agriculture Route (FAR).

Neighborhood Plans and Policies

The following land use plans and policies have been approved by the City of Fitchburg, are specific to new or existing neighborhoods, or address rural development throughout the City. New developments in Fitchburg are required to provide pedestrian and bicycle facilities. These plans and policies have been considered for the development of bicycle and pedestrian recommendations for this Plan Update.

Nine Springs Neighborhood Plan (1998)

- Plan includes required sidewalks and recreational paths throughout the linear park areas
- Provides for a recreational path constructed to connect McGaw Park with the Capital City Trail
- Recommends a major pedestrian promenade to link transit and commercial areas, as
 well as a boardwalk through wetland areas and connecting to the fish hatchery. The
 recommended promenade is planned to be located within a 75-ft linear park
 throughout the residential areas

Southdale Neighborhood Plan (2009)

- Recommendations include closing a gap in the on-street bicycle lane route along the perimeter of the neighborhood (Ski Lane and CTH MM) to connect to the Capital City Trail
- Recommends installing sidewalks on both sides of new streets (per City requirements)
- Recommends new sidewalks to close network gaps along Ski Lane, Clausen Street, Country Rose Court, and CTH MM

Arrowhead Redevelopment Plan (2011)

- Proposed transportation network includes a number of grade-separated bicycle/ped crossings, one of which has been constructed (McKee Road and Cannonball Path)
- The proposed transportation network also includes 'Complete Streets' throughout, with bicycle lines, sidewalks, and street trees

North Stoner Prairie Neighborhood Plan (2012)

 Land Use recommendations include a number of proposed trails, such as an eastwest trail through the middle of the development, connecting to the Badger State Trail, Seminole Highway, Stoner Prairie Elementary School and Savannah Oaks Middle School, and to the Quarry Ridge Recreation Area

Rural Cluster Zoning Ordinance (2012)

- Document outlines the design standards for Rural Cluster Zoning throughout the rural areas of Fitchburg, and is not specific to a neighborhood
- 22-611.104 (6) "Compatibility with recreational trails, bicycle trails specifically the Fitchburg Heritage Circle Route and wildlife corridors noted in the Fitchburg Park and Open Space Plan."

McGaw Park Neighborhood Plan (2009, Amended 2014)

- Plan includes extending sidewalks along Lacy Road, to access the neighborhood's east boundary
- Plan also recommends sidewalks along both sides of all roadways within the McGaw Park Neighborhood, or the development of a multi-use path
- Plan recommends bicycle lanes on both sides of the street for a number of new proposed roads (Nobel Drive Extended and Research Drive), as well as extending bicycle lanes along Lacy Road

Upcoming Capital Improvement Projects

Lacy Road - Community Center to Syene Road (2017)

The reconstruction of Lacy Road between the Community Center and Syene Road will replace deteriorating pavement and provide for improved bicycle and pedestrian facilities. The improvements will involve the following:

- An 8-10' shared use path on the south side of Lacy Road
- 4' bicycle lanes with a 2' buffer separating bicyclists from motor vehicle traffic
- A roundabout at the intersection of Fahey Glen and Lacy Road
- Addition of LED Street Lighting

Lacy Road West of Seminole Highway

Lacy Road will also be reconstructed west of Seminole Highway with improved bicycle and pedestrian facilities.

McKee Road (2020)

The McKee Road resurfacing and improvement project may result in the following:

- A separated bicycle facility along the south side of the road
- A sidewalk along the north side
- A tunnel for the Badger State Trail crossing at McKee Road

South Syene Road (2021)

This rural to urban reconstruction of South Syene Road may result in the following:

- Reduced speed of 35 mph
- A sidewalk on the east side of Syene Road to Lacy Road
- On-street bicycle lanes
- A roundabout at East Cheryl Parkway
- An improved traffic signal at Lacy Road

Seminole Highway

The reconstruction of Seminole Highway through the North Stoner Prairie neighborhood may result in the following:

- Installation of a sidewalk on the east side
- A shared use path on the west side
- Addition of on-street bicycle lanes

3. Network Recommendations

This chapter contains the following sections:

| 3.1 | Facility and Network Overview | 42 |
|-----|--|----|
| 3.2 | Bicycle Route Network Recommendations | 46 |
| 3.3 | Pedestrian Route Network & Policy Recommendations | 52 |

3.1 – Facility and Network Overview

The City of Fitchburg has many assets for walking and bicycling in place today. However gaps in the network make it difficult for many people to walk or bicycle safely and comfortably in their neighborhoods and access important destinations including schools, local parks, commercial areas, and transit. The infrastructure recommendations outlined in this chapter address gaps and barriers in the existing network, and provide guidance for developing a more complete, equitable, and inviting network for walking and bicycling in Fitchburg.

Recommendations are based on engagement with the general public, City Boards/Commissions, and the City's Bicycle and Pedestrian Advisory Committee (BPAC), as well as detailed network analysis, site visits, and current best practices. Further facility design and engineering must be completed prior to implementation of any recommendations.

Pedestrian and Bicycle Facility Types in Fitchburg

A variety of facility types can be used to improve accessibility, mobility, and connectivity options for people walking and bicycling in Fitchburg. For more information about facilities and crossing treatments as well as selection and application guidance, see Appendix A.

Sidewalks

Sidewalks are paved concrete or asphalt walkways designed for pedestrian use. A well-connected sidewalk network is the foundation of pedestrian accessibility. High quality sidewalks include level and unbroken surfaces, ADA compliant curb ramps, lighting, and trees and plantings. Vegetated areas double as snow storage for street maintenance in winter climates. Additional elements like benches, waste receptacles, and public art provide additional user comfort and interest.

Goals for the Plan Update

Recommendations are guided by the following major goals, which were developed through the Plan Update process:

Expand Options

- Create a plan that makes walking and bicycling an option for more residents, workers, and visitors
- Use a multi-faceted approach, including a variety of facility options and program recommendations, to provide safe, comfortable, and inviting places to walk and bicycle

Connect

- Connect to regional trails network and neighboring communities
- Improve walking and bicycling connections to public transportation and to destinations in the city

Improve Networks and Intersections

 Improve the existing bicycle and pedestrian network, and improve key intersections to increase safety and comfort for people who walk or bicycle in the city

Invest

 Continue to invest in the amenities and enhancements that support a walkable and bikeable city

Engage

 Strengthen, enhance, and promote education and encouragement activities through local engagement with residents, businesses, employers and city employees

Shared-Use Paths (SUPs)

A shared-use path provides a shared space for people walking and bicycling that is separate from motor vehicle traffic. Shared-use paths work better when they include fewer intersections with motorized traffic.

In this plan, shared-use paths are recommended parallel to busy roadways where on-street bicycle facilities would not be suitable for the majority of users, as well as in locations where there is not an existing roadway but a pedestrian and bicycle connection will complete a network loop. In the City of Fitchburg, it is preferred to also locate shared-use paths along roadway corridors with limited roadway crossings and driveways. Shared use paths are also located within parks and through natural or scenic areas. Striping shared-use paths helps to clarify travel direction, and identifies separate lanes for people walking or bicycling in high use areas.

Shared-use paths should be a minimum width of ten feet. Eight foot widths are acceptable for short distances in constrained spaces. Asphalt is recommended to help differentiate from sidewalks, to provide a smoother surface for wheeled users, and to reduce initial installation costs.

In Fitchburg, the name "shared-use path" is used for those paths that are those that are open to the public, maintained by the City of Fitchburg, and do not require a fee to use.

Shared-Use Trails

In Fitchburg, the name "shared-use trail" is used to designate shared-use paths that are a part of the statewide or regional systems and that require a fee for users.

Neighborhood Slow Streets

Neighborhood Slow Streets are residential streets designed to prioritize bicycle and pedestrian travel while making motor vehicle traffic more calm. They can include some or several types of traffic-calming elements: bump-outs, traffic circles, speed tables, or pavement markings.

Neighborhood Slow Streets make walking, bicycling and driving easier and safer by reducing motor vehicle speeds



Shared-use paths are recommended along roadways to provide space that is separate from motor vehicle traffic, and wide enough to accommodate people walking and bicycling.



Signage along shared-use paths may be used to encourage safe trail behavior.



Neighborhood Slow Streets can include traffic calming elements, and prioritize non-motorized travel.

Network Recommendations

and by improving crossing movements; they benefit all residents and roadway users by improving overall traffic safety along the corridor. Route signage, pavement markings, and stop sign orientation can help highlight the street as a bikeways or walkway.

Bicycle Lanes

Bicycle lanes designate a portion of the roadway for preferential use by people bicycling. Lanes are defined by paint and pavement markings, and may also include signage. Bicycle lanes may be located adjacent to curbs or on-street parking. Shared bicycle/parking lanes are discouraged. In Fitchburg, a typical and recommended bicycle lane is 6 ft. wide, which includes a 2 ft. wide gutter pan. Where possible, bicycle lanes in Fitchburg are not adjacent to on-street parking. Where bicycle lanes are adjacent to on-street parking, bicycle lanes should be placed outside of the door zone to prevent the risk of dooring incidents.

Buffered Bicycle Lanes

Buffered bicycle lanes are conventional bicycle lanes that include an additional painted buffer space for increased separation between people bicycling and people driving. Buffers should be a minimum of 2 ft wide. Wider buffers with cross-hatching are recommended as space allows to further separate people bicycling from motor vehicle traffic, and to increase user comfort. If on-street parking is present and space allows, an additional painted buffer may be provided between the bicycle lane and on-street parking to reduce the risk of dooring incidents.



Bicycle lanes designate a portion of the roadway for preferential use by people bicycling.



Buffered bicycle lanes provide an additional painted buffer space between the bicycle lanes and vehicle travel lanes. Buffers between onstreet parking and bicycle lanes are also recommended when space allows.

Protected Bicycle Lanes or Cycletracks

A protected bicycle lane (also known as a separated bicycle lane or cycletrack) is an exclusive space for bicycles separated from motor vehicle traffic by a painted buffer and a physical barrier (such as a curb, parked cars, or bollards). Protected bicycle lanes are separated and distinct from the sidewalk. Protected bicycle lanes significantly increase bicycle ridership for people of all ages and experience levels because the distinct separation from motorized vehicles greatly increases rider comfort.

Removable bollards (also known as "candlesticks") can be used seasonally as a method for protecting bicycle lanes during the spring, summer, and fall. Removing the bollards during the winter months can alleviate conflicts with snow plow methods.

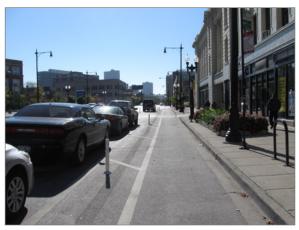
Shared-Lane Markings (Sharrows)

Shared-lane markings (often called sharrows) are pavement markings used to communicate bicyclists' right to use the full roadway space for their travel. Sharrows help bicycle riders position themselves safely in travel lanes that cannot accommodate a bicycle lane or other facility.

Paved Shoulders

Paved shoulders are lanes adjacent to drive lanes that have been paved for the purpose of providing space along the road for bicyclists. Paved shoulders have striping to separate the vehicles from bicyclists. In Fitchburg, paved shoulders are installed intermittently on County and local rural roads. Hill approaches are prioritized for improved paved shoulders.

Paved shoulders, in combination with reflective signage and wayfinding, can help drivers be aware of the potential presence of bicyclists along the roadway. Paved shoulders are not a recommended pedestrian facility.



Above, a protected bicycle lane is separated from moving traffic by parked cars, a buffer space and removable bollards.



Shared lane markings indicate that bicyclists have the right to use the full travel lane.

Network Facilities

The network recommendations for both bicycle and pedestrians in this plan provide a framework for understanding where the City of Fitchburg would like to prioritize future facility improvements. Each route type indicated as a recommendation represents a variety of facilities to be implemented, all of which will need to be carefully considered within the specific site and scope of the project. All recommendations will require engineering and design services, along with a community/public approval process before any facilities can be constructed.

Table 3.1 below outlines shows the route types that are recommended in the following pages in this Plan, along with each facility type that is strongly recommended (understood to provide the most appropriate level of safety and comfort for users), recommended (understood to provide an appropriate level of safety and comfort for users), and considered (facilities that may be appropriate, depending on the specific circumstances of the site constraints and public approval).

Table 3.1 - Bicycle and Pedestrian Facilities and Network Matrix

| Pedestrian Network | Bicycle Network | Route Type | Shared Use Paths* | Neighbhd. Slow Street Traffic Calming | Bicycle Lanes | Buffered / Protected Bicycle Lanes / Cycletracks | Shared- Lane Markings | Paved Shoulders |
|-----------------------|--------------------|----------------------------------|----------------------|--|------------------|--|-----------------------------|--------------------|
| | ✓ | Primary Bike Routes | S | С | R | S | | R** |
| | ✓ | Neighbhood. Bike Routes | С | S | С | | R | |
| √ | √ | Scenic Recreational Trails | S | | | | | |

S = Strongly Recommended R = Recommended C = Considered

* Not applicable to existing neighborhoods as identified in Figure 3.5 herein

** Recommended only in rural areas of Fitchburg

3.2 - Bicycle Route Network Recommendations

The Draft Bicycle Route Network (Fig. 3.1) designates three types of bicycle routes for the City of Fitchburg. These routes overlap existing network segments, with an overall goal of closing network gaps and creating a visible, inviting, consistent, and connected experience for bicycling in Fitchburg. Within each route type, a variety of facilities are recommended while maintaining consistency and responding to existing infrastructure and site constraints. Priorities can be easily be identified for future investments and improvements with these designations.

To better understand the different route types, Figures 3.2, 3.3, and 3.4 show the three route types independently.

Primary Bicycle Routes

Primary Bicycle Routes are the most useful and important in the city, providing connectivity and access to important destinations and to other route types. These are routes that are already being used heavily for commuting, recreation, and transportation by bicycle, and include routes that have been identified by the community as places they would like to ride safely and comfortably.

Not surprisingly, these are also routes that have been identified by the community as raising the most concern for the safety of bicyclists, and the comfort of drivers who share the road with bicyclists.

The emphasis along these routes will be to provide a consistent network of off-street facilities (shared-use paths and protected bike lanes) or enhanced on-street facilities (buffered bicycle lanes), with conventional bicycle lanes only used where it is not possible to accommodate protected or separated facilities. Primary Bicycle Routes overlap existing on- and off-street facilities, and integrate with the existing shared use trail and path network. These routes are intended to be of the highest priority for improvements, maintenance, and safety.

Where possible, upgrading paved shoulders to enhanced on-street facilities or shared-use paths is a long-term vision for these routes.

See Figure 3.2 for Primary Bicycle Routes, as shown within the Draft Bicycle Route Network.

Neighborhood Bicycle Routes

Neighborhood Bicycle Routes will connect bicyclists within neighborhoods and also connect neighborhoods to the Primary Bicycle Routes. These routes will provide closed loops for shorter recreational rides within neighborhoods at locations with lower motor-vehicle traffic volumes (daily traffic of 3,000 or less), and also provide connections to community destinations like parks and schools. The emphasis along these routes is to increase awareness for the presence of bicyclers and to provide a consistent network of on-street facilities (Neighborhood Slow Streets, bicycle lanes, sharrows), as well as to connect to existing off-street facilities (shared use paths and trails) throughout neighborhoods.

See Figure 3.3 for Neighborhood Bicycle Routes, as shown within the Draft Bicycle Route Network.

Scenic Recreational Trails

Scenic Recreational Trails represent conceptual long-term vision for connecting the rural areas of Fitchburg through a network of scenic, off-road trails. These routes could potentially coincide with the long-term vision of the Comprehensive Parks, Open Space and Recreation Plan, and could potentially replace or compliment portions of the Primary Bicycle Routes in the future.

Primary Intersections

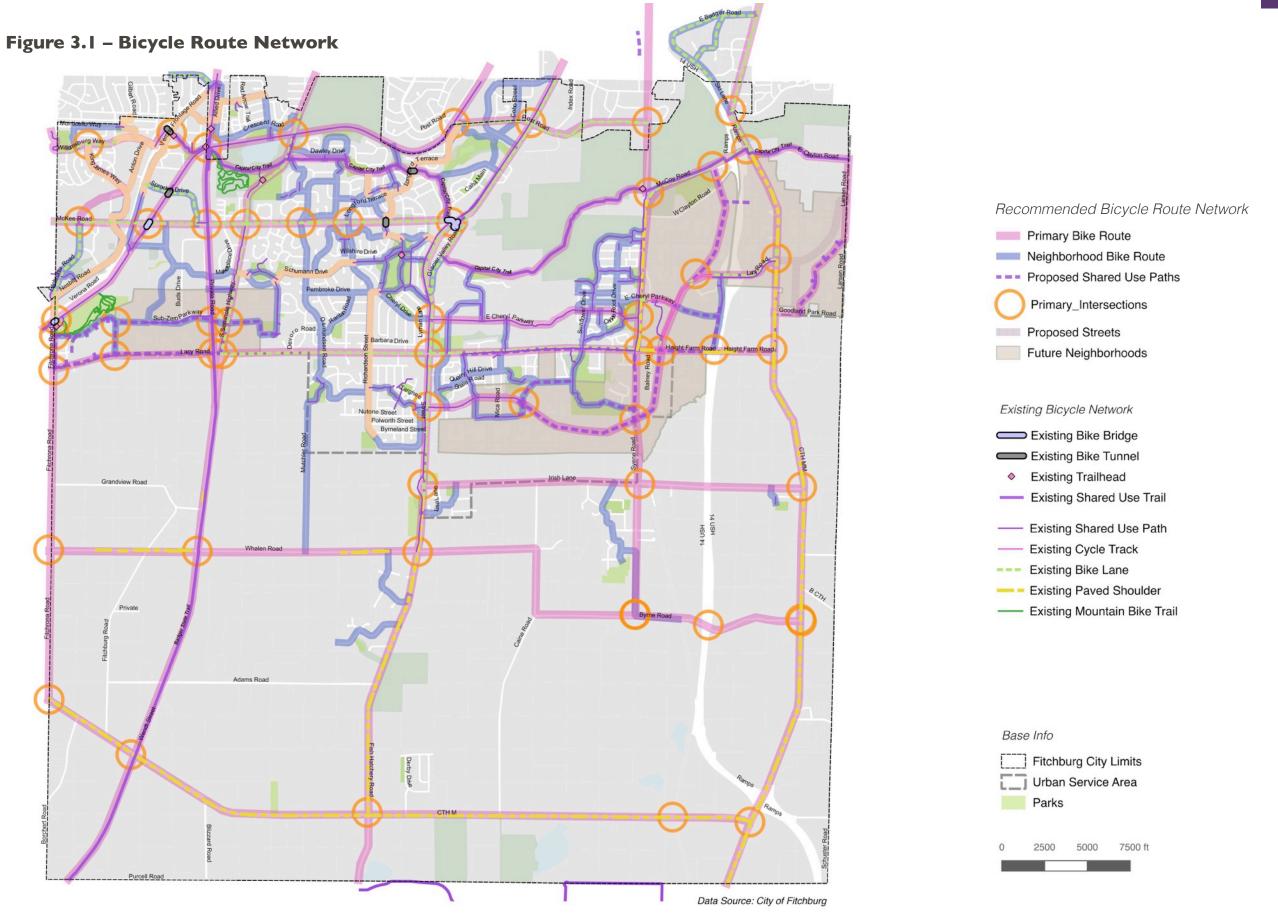
Primary Intersections have been identified as the highest priority for bicycle and pedestrian crossing improvements, as they are located at the intersections of Primary Bicycle Routes. Primary Intersections connect people to important community amenities and destinations.

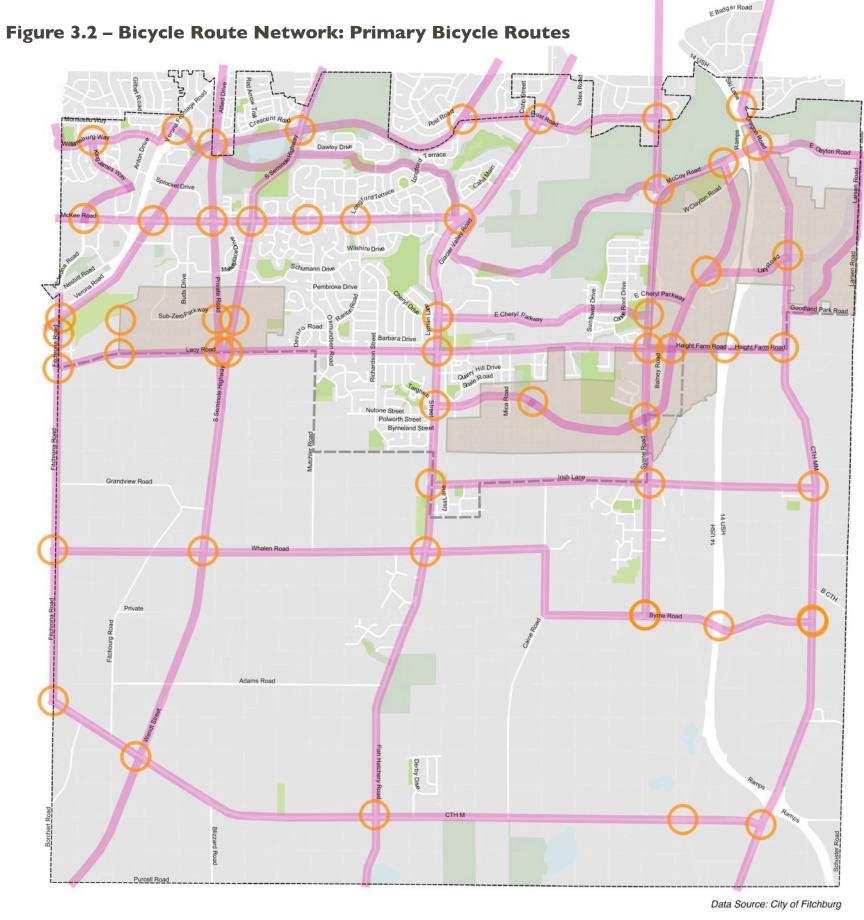
A variety of treatments are recommended for these intersections (depending on specific context), including forward stop bars, high visibility cross walks, leading pedestrian interval signal improvements, loop detectors, cross walk signals and pedestrian countdowns, and attention to curb ramps and sidewalk connectivity. See the Infrastructure Toolkit (Appendix A) for further information on facility types.

The same Primary Intersections are also included as part of the Draft Pedestrian Network Plan.

Table 3.2 – Additional Recommendations for Bicycling

| Bicycle network design | Draw on latest best practices for full selection of bikeways facilities. Sources include: 2012 AASHTO Guide for the Development of Bicycle Facilities, NACTO Urban Bikeways Design Guide, FHWA Separated bicycle Lane Planning and Design Guide, and others |
|--|--|
| Bicycle parking/end-of-trip facilities | Establish an ongoing "Request-a-Rack" program and encourage businesses to provide lockers and/or showers for employees who commute by bicycle. |
| | Develop incentive programs to encourage installment of bicycle parking at existing destinations including commercial and employment centers, recreational areas, schools, and other community destinations where people may arrive by bicycle. |
| | More information about bicycle parking is provided in Chapter 4 and in Appendix A. |
| Bicycle treatment at intersections and trail crossings | Mark bicycle lanes across right-turn lanes and through intersections by marking them with green paint where appropriate. |
| | Install chevrons and dashed lines across intersections where appropriate. |
| | Install signage at conflict points where appropriate to alert drivers of the presence of bicyclists. |
| | Establish guidelines for installing medians or raised crosswalks at trail crossings and intersections. |
| | Install bicycle signal detection including loop detectors or camera detection along bikeways when signals are installed or majorly updated. |
| | More information about intersection treatments is included in Appendix A. |
| Lighting of trails and on-road facilities | Establish policies for providing lighting along on- and off-road facilities, and in tunnels and other areas along trails as needed. |
| Bicycling on sidewalks | Develop a city-wide policy establishing an appropriate age and speed at which a bicyclist may be allowed to ride on a sidewalk. For instance, allowing children under the age of 13 to use sidewalks for bicycling, with a speed limit of 10mph. |
| Electric-assist bicycles | Consider developing a city-wide policy to address shared facilities with users of electric- assist bicycles (e-bikes) |





Primary Bike Routes are routes that are already being used heavily for commuting, recreation, and transportation by bicycle. The emphasis along these routes will be to provide a consistent network of off-street facilities (shared-use paths) or enhanced onstreet facilities (bike lanes or buffered bike lanes), with conventional bike lanes only used where it is not possible to accommodate protected or separated facilities. Primary Bike Routes overlap existing on- and off-street facilities, and integrate with the existing shared use trail and path network. These routes are intended to be of the highest priority for improvements, maintenance, and safety.

Recommended Bicycle Route Network: Primary Bike Routes

Primary Intercept

Primary Intersections

Primary Bike Route
Proposed Streets

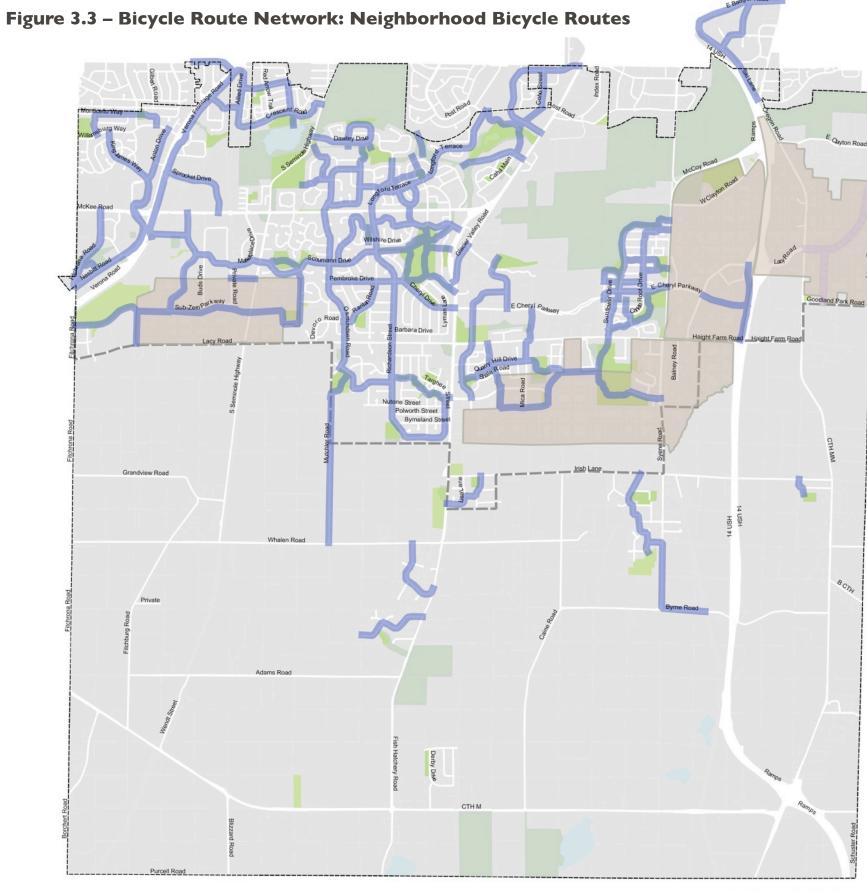
Future Neighborhoods

Base Info

Fitchburg City Limits
Urban Service Area

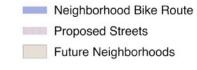
Parks

2500 5000 7500 ft



Neighborhood Bike Routes will connect bicyclists within neighborhoods and also connect neighborhoods to the Primary Bike Routes. These routes will provide closed loops for shorter recreational rides within neighborhoods at locations with lower motorvehicle traffic volumes (daily traffic of 3,000 or less), and also provide connections to community destinations like parks and schools. The emphasis along these routes is to increase awareness for the presence of bikers and to provide a consistent network of on-street facilities (Neighborhood Slow Streets, bike lanes, sharrows), as well as to connect to existing off-street facilities (shared use paths and trails) throughout neighborhoods.

Recommended Bicycle Route Network: Neighborhood Bike Routes



Base Info





Data Source: City of Fitchburg

3.3 – Pedestrian Route Network & Policy Recommendations

Pedestrian Network

The emphasis of the Draft Pedestrian Network (Fig. 3.4), comprised of various existing and potential pedestrian treatments, is to encourage safe and convenient options for walking in the City, including within neighborhoods and to community destinations.

The following identifies major features of the Draft Pedestrian Route Network:

Proposed Shared Use Paths

These areas have been identified as vital pedestrian connections. The large majority of these areas are in future neighborhoods and have been identified in City-adopted neighborhood plans. The location of these areas is generalized and may be subject to change based on specific future development patterns, including development of additional shared use paths not identified on Fig. 3.4. Shared use paths are maintained by the City.

Community Destinations

These areas have been identified as those where people are most likely to walk to, including schools, community and area parks, employment, commerce, and leisure/recreation activity centers, and civic amenities such as libraries, community/neighborhood centers, and government administration buildings.

Pedestrian Activity Areas

These areas are within 1/4 mile of community destinations. In general, people are most likely to walk to a destination if the time it takes to reach the destination is around 5-10 minutes (a 5-minute walk corresponds roughly to a 1/4 mile).

Primary Intersections

These intersections have been identified as the highest priority for bicycle and pedestrian crossing improvements, as they connect people to community destinations and are located at the intersections of Primary Bicycle Routes.

Pedestrian Policy

The following identifies this Plan's pedestrian policy recommendations:

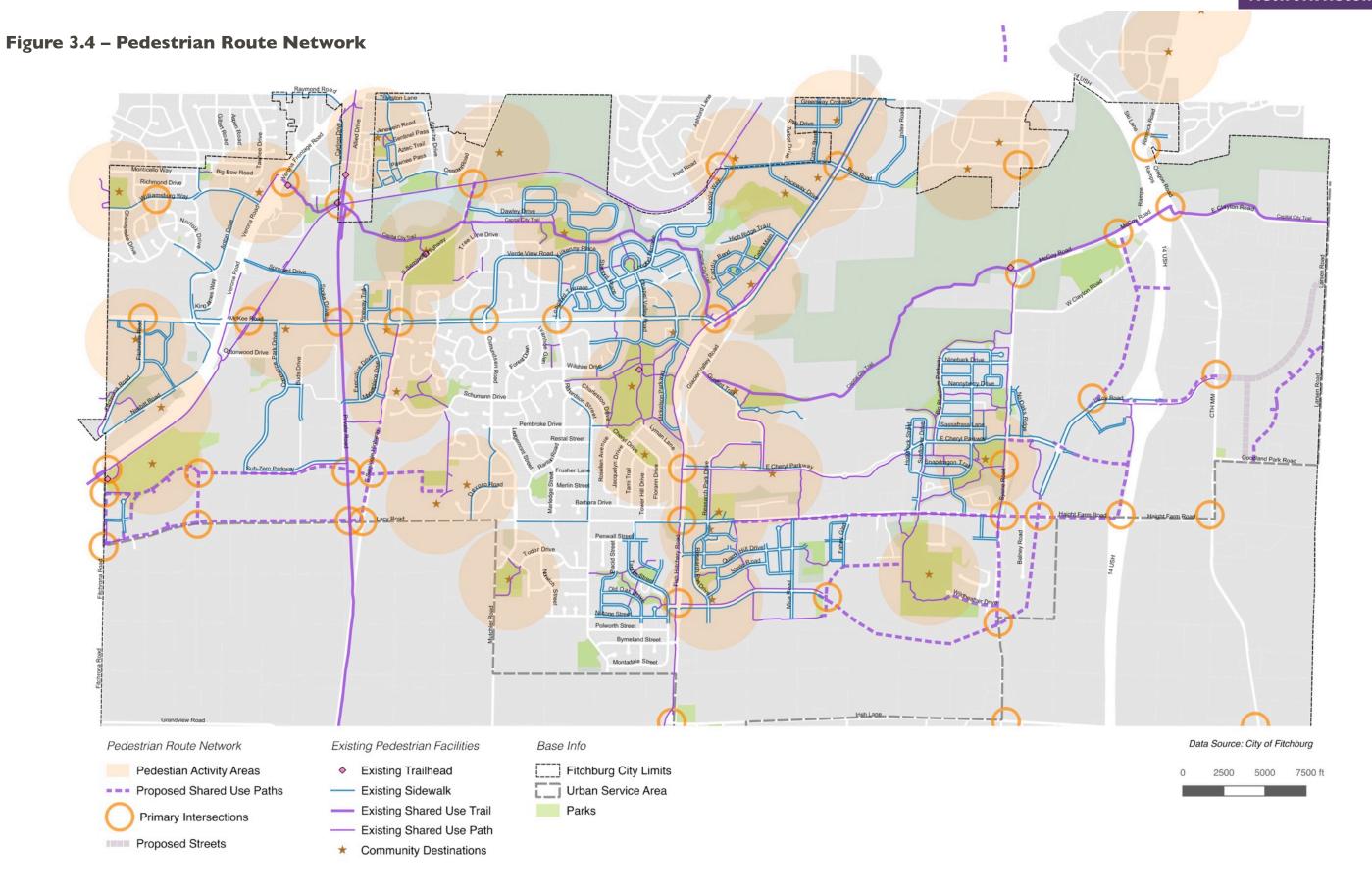
- 1. Implement Proposed Shared Use Paths, and appropriate related treatments, in accordance with future development;
- 2. Residential properties in existing neighborhoods, as identified on Figure 3.5 herein, shall not be subject to sidewalk or shared use path installation, unless all of the following criteria (1. and 2.) are met:
 - 1. The sidewalk or shared use path has been requested by the neighborhood residents and/or property owners, or has been quantitatively documented as the only recourse to eliminate a hazardous condition;
 - 2. The Installation of said sidewalks is agreed to by a minimum of 75% of affected property owners;

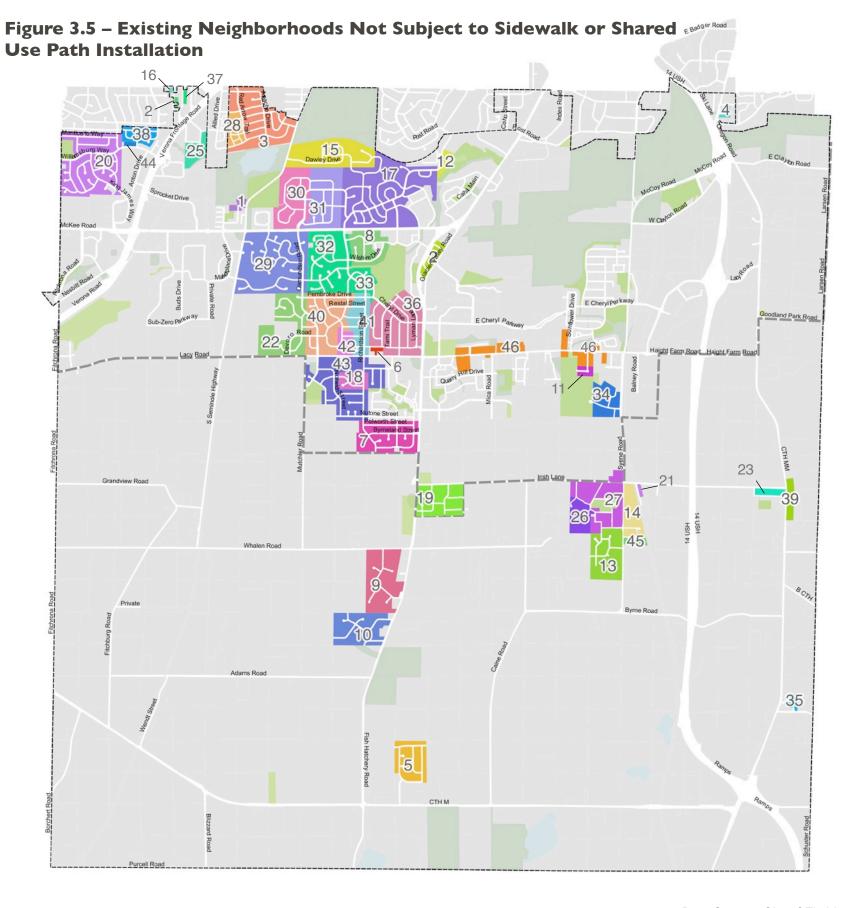
Shared use path installation on Lacy Road between Fitchburg City Hall (5520 Lacy Rd) and S. Syene Road shall not be subject to the restriction identified in the preceding paragraph, per Resolution R 101-15.

- 3. A variety of treatments may be considered for Primary Intersections (depending on specific context), including forward stop bars, high visibility cross walks, leading pedestrian interval signal improvements, loop detectors, cross walk signals, curb extensions, and attention to curb ramps. See the Infrastructure Toolkit (Appendix A) for further information on facility types.
- 4. Table 3.3 identifies additional treatments to encourage walkability in the City.

Table 3.3 – Additional Recommendations for Walkability

| Urban design amenities | Encourage street trees, vegetative buffers, and street furnishings to control stormwater and provide shade. |
|--|---|
| | Accommodate necessary utility infrastructure. |
| | Allow for facilities that enhance the pedestrian environment including pedestrian- scaled lighting, public art, wayfinding, plantings, etc. especially in areas identified as Pedestrian Activity Areas |
| | Accommodate commercial activities that invite walking and add activity and interest to the area. |
| Street crossings | Reduce unsafe crossing behavior by providing safe, marked opportunities for people walking or bicycling to cross the street at least every half-mile along minor arterials, and every quarter-mile in neighborhoods and adjacent to commercial or retail development, schools, parks, and along transit routes. |
| | Install ADA-compliant curb ramps at all marked and unmarked crosswalks. |
| | Establish guidelines for use of raised crosswalks and median refuge areas for crossing areas (See Infrastructure Toolkit in Appendix A) |
| | Increase installation of curb extensions where possible, including neighborhoods and where on-street parking is permitted. |
| | Design intersections with the minimum allowable turning radii to slow traffic speeds, to allow perpendicular curb ramps to be positioned parallel to crosswalks and perpendicular to curb, and to shorten overall crossing distance. |
| | Design channelized turn lanes and median refuges with attention to bicycling and walking movements. |
| | Avoid multiple turning lanes when possible. |
| | Implement advanced stop bars to deter motorists from encroaching into crosswalks when stopped. |
| Pedestrian crossing signals | Continue updating pedestrian crossing signals to countdowns until all units have been converted. |
| | Test new user-activated technologies for traffic control including Rapid Rectangular Flashing Beacons (RRFB), Pedestrian Hybrid Beacon (PHB or HAWK), and others. |
| | Consider implementation of Leading Pedestrian Intervals. |
| | Ensure that clearance intervals are properly timed. |
| Requirements for sidewalks in new developments | Continue to require installation of sidewalks in new developments and redevelopments per existing city ordinance/policy. (Redevelopment constitutes "infill" development, or a change in intensity of use, to create a new building area) |
| Traffic Calming | Explore development of Neighborhood Slow Streets and install traffic calming measures, such as speed bumps, traffic circles, and raised intersections in accordance with the City's Neighborhood Traffic Management Process. |







Data Source: City of Fitchburg

4. Program & Operations Recommendations

This chapter contains the following sections:

| 4.1 | Education and Encouragement Program Recommendations | 58 |
|-----|---|----|
| 4.2 | Enforcement and Network Safety Recommendations | 65 |
| 4.3 | Policy Recommendations | 67 |
| 4.4 | Bicycle Parking Recommendations | 69 |
| 4.5 | Facility Maintenance Recommendations | 70 |
| 4.6 | Evaluation and Performance Measure Recommendations | 75 |

4.1 – Education and Encouragement Program Recommendations

Increasing walking and bicycling in Fitchburg will require physical improvements along with the implementation of programming strategies including education, encouragement, policy changes, and facility maintenance.

Education and encouragement programs promote increased walking and bicycling by educating roadway users on safe interactions, incentivizing walking and bicycling trips, and spreading awareness and support for non-motorized transportation options.

Network Maps

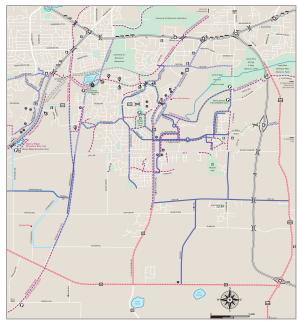
Printing and distributing bikeways maps is a high-benefit, low-cost way to promote walking and bicycling by helping people identify route choices. Network maps can also be used to promote the city's local businesses and festivals.

Map inserts can provide information covering rules of the road, bicycle safety and maintenance, and connecting with mass transit. Another low-cost and potentially helpful tool is integrating web-based trip planner services (like Google Maps) into the city's website or events pages. Walking and bicycling route and parking information can also be prioritized when providing directions to city events to encourage more people to arrive on foot or by bicycle.

Currently, Fitchburg has a high-quality bicycle route brochure, with information on the route network, traffic laws and safe riding practices, information on state trail passes, and contact information for bicycle advocacy organizations.

Strategies for education and encouragement programming

- Educate the public about walking and bicycling as sustainable modes of transportation that save money, promote healthy living, and reduce emissions and traffic congestion.
- Develop activities and events to overcome barriers to walking and bicycling.
- Support programs to encourage employers to support walking and bicycling as viable transportation options.
- Provide tools for residents and visitors to easily report issues or concerns.
- Partner with community organizations and local businesses to promote and participate in education programs.
- Work with partners to expand driver education and coursework about the rights and responsibilities of all road users.



2013 Fitchburg Bicycle Map developed as a collaborative effort between the City of Fitchburg and the Fitchburg Chamber of Commerce.

This brochure is provided by the Fitchburg Chamber of Commerce. Regular updates will help to maintain up-to-date information. Integrating information related to pedestrian facilities and messaging related to public transportation might also be helpful.

Another current map resource is a brochure titled "I Love to Bicycle! Family Fun Map." This brochure is aimed at families and outlines shorter-distance loops for riding. It has been translated into Spanish to help reach a wider audience, and was produced through a partnership with the Healthy Kids Collaborative, Pacific Cycle and Wisconsin Bicycle Fed. Products like this map are great examples of how community organizations can come together to produce an easy-to-use tool that encourages bicycling for people of all ages.

Wayfinding

Wayfinding tools, including signs, pavement markings, maps, and online trip planning tools make it easier for people to navigate existing facilities on foot or by bicycle by directing users to nearby walking routes, paths and trails, and important destinations. Ensuring information is easy to find and understand helps bring a wide range of people to the benefits of walking or bicycling for more of their trips.

A wayfinding system, including signs and pavement markings, helps people navigate the existing network. Update signage as needed to reflect new destinations and newly implemented facilities. Include wayfinding signs as a component of all projects, especially those along recommended pedestrian and bicycle routes, or those surrounding community destinations.

Wayfinding and signage should be coordinated with the Dane County Wayfinding Guide (2016), the City of Fitchburg Exterior Signage and Community Placemaking System (2013) and any other applicable local guides and standards.

Additional guidance for wayfinding including sign types and application can be found in Appendix A.



I Love to Bike! Network Map.



Group bicycle ride.



A robust wayfinding system enables people to easily navigate the available network when traveling to destinations.

Community Walking and Bicycling Events

Special events offer an opportunity to bring attention to practical, fun, and healthy aspects of walking and riding a bicycle as tools for transportation, recreation, and health. Because these events are community-wide and of limited duration, people are more open to participating without feeling like they have to commit to making a long-term change in their travel or recreation habits - but sometimes that's all that is needed to open the door to adopting new travel behaviors over the long term.

Today, there are a number of groups throughout Fitchburg and the surrounding area that organize group bicycle rides and facilitate raising awareness of the benefits and enjoyment of bicycling in Fitchburg.

Specific Event Recommendations:

- Monthly group rides with the Fitchburg City Council, the Mayor or other local personalities
- Open Streets events that close a road or two to auto traffic once a month and make it a bicycle and pedestrian-only street
- Parks and recreation programs that work with non-profit or bicycling advocacy groups to sponsor bicycling events and activities, especially on trails and regional bicycling routes
- Participating in walk/bicycle weeks. These types of events, including Walk/Bicycle to Work Week, often include special publicity, route guidance, group events, and pit stops for participants, and provide a fun and inviting opportunity for people to try walking or bicycling in their community.
- Coordination of events with local bicycle-related businesses or the Fitchburg Chamber and Business Bureau
 - Bike for Boys and Girls Club
 - Fitchburg Agricultural Route Bike Tour
 - October Celtic Cross



Special events encourage residents to be more active and healthy.



Open Streets event.



School bicycling events encourage children to be more active out of school.

Strategic Kid-Friendly Walking and Bicycling Events

A number of specific events have been identified by the City of Fitchburg which aim to engage students and families in walking and bicycling, and also intend to focus engagement in specific neighborhoods and school areas that have higher concentrations of students living nearby. These programs, which vary in scope and service area, will be implemented through partnerships between a number of local agencies, non-profit organizations, and school districts.

Neighborhood Outreach: Leopold, Belmar/Dunn's Marsh, and Jamestown

- Focus on walking and bicycling opportunities for kids living in the Leopold, Belmar/Dunn's Marsh, and Jamestown neighborhoods. Activities for kids to include:
 - Open School or Open House events, such as bicycle riding or fix-it education
 - Bicycle/Ped events in the neighborhood and around the school
 - Create a walking school bus program
 - Create a bicycle park
 - Create a neighborhood bicycle share
 - Taking advantage of the Madison Metropolitan School District's bicycle fleet in physical education classes
- Create a program for Parent-Community Liaisons by enlisting two parents living in the school neighborhood to facilitate information sharing
- Partner with existing network including Aldo Leopold Elementary, Fitchburg Parks, Madison and Fitchburg Police Department, and the Boys and Girls Club

Elementary School Outreach: Leopold Elementary School

- Partner with Leopold Elementary School, along with community bicycle advocates and other interested partners, such as Healthy Kids Collaborative
- Activities to include:
 - WOW Challenge (2017)
 - Slow Roll (2017)
- Evaluation of the engagement activities will happen through data gathering with PPM (Participatory Photo Mapping) and surveys



Walking school buses provide fun and active opportunities for schools.

County-wide Outreach: Dane County Safe Routes to School (SRTS)

- Partner with Leopold Elementary School, along with planners and police officers from these communities and potentially other area schools, Healthy Kids Collaborative, and the SRTS Coordinator
- Strategize on creating walking school buses
- Assess current walking and bicycling routes through surveys and student-led Participatory Photo Mapping (PPM).
- Re-design walking and bicycling routes for Leopold Elementary
- Utilize parent and student survey materials, such as bicycling and walking tallies to guide activities and to evaluate the performance of these programs

Regional Outreach: Healthy Kids Collaborative's Active Living Action Team

- Partner with stakeholders and advocates from the Healthy Kids Collaborative from Middleton, Fitchburg, Madison, Sun Prairie, Cross Plains, Monona, UW-Madison and Dane County to increase bicycling and walking opportunities through municipal and county policies
- Strategize Complete Streets and Safe Routes to Schools in these areas
- The Healthy Kids Collaborative's Active Living Action Team can promote activities such as:
 - WOW (Walk or Wheel) Challenge. This is a competition held in October where Dane County schools compete with one another for the largest number of students walking or bicycling to school during the week
 - Walking School Bus
 - Evaluating the impacts of programs through parent, student, and teacher surveys

Bicycle Giveaway and Fleets

Support and promote programs such as Free Bikes 4 Kidz (<u>www.fb4kmadison.org</u>)
and other initiatives that provide free or discounted bicycles for kids in the Fitchburg
Area

Rider Incentive and Bicycle Friendly Businesses

Increased use of walking and bicycling can improve community health and support local economic development as well. Several types of incentive programs are in use in communities throughout the United States, which encourage customers and employees to bicycle or walk.

Some of the most popular programs include:

- Business associations provide discounts to shoppers who arrive by bicycle; and
- Employers offer parking cash-out benefits, which give employees who don't drive the cash equivalent of the parking subsidies provided to drivers.
- Guaranteed Ride Home programs, which help remove some of the concerns about bicycle commuting
- Organized employee bicycle rides, or commuter challenges like the National Bicycle Challenge
- Providing bicycle share subscriptions for employees
- Providing showers, locker rooms, changing areas and repair areas for employees

As noted in the chapter on Existing Conditions, the City of Fitchburg has been named a Bicycle Friendly City by the League of American Cyclists, with a Silver Status. Additionally, two businesses within Fitchburg have been recognized with Silver Status as Bicycle Friendly Businesses by the League of American Cyclists (Race Day Events & Saris). Bicycle Friendly Businesses are awarded for efforts to encourage a more welcoming atmosphere for employees who bicycle to work, and for customers and community members who also engage in bicycling.

A business can apply to become a Bicycle Friendly Business at **bicycleleague.org/business**. If awarded, businesses are recognized through national press releases, the League of American Cyclist social media, and listed on an interactive awards map.

A recommendation for this plan is to encourage more businesses to be recognized as Bicycle Friendly Businesses.

Bicycle Friendly Cities Program

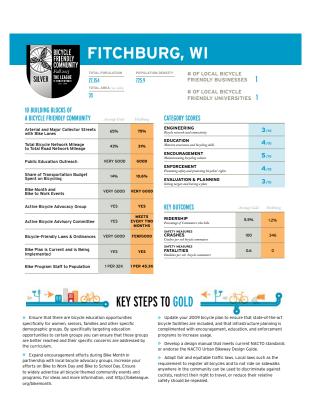
Currently, the City of Fitchburg is designated as a Bicycle Friendly City by the League of American Cyclists, with a Silver Status awarded for Fall 2015.

Some of the programs and assets that supported this designation are very good reports for activities related to Bicycle Month and Bicycle to Work events, as well as having an active bicycle advocacy group.

A recommendation within this Plan is to strive for Gold Status as a Bicycle Friendly City. This would include the following actions:

- Ensure that there are bicycle education opportunities specifically for women, seniors, families and other specific demographic groups.
- Expand encouragement efforts during Bicycle Month (May), Bicycle to Work Day and Bicycle to School Day.
- Follow-through with Encouragement, Education, and Enforcement Programs, as defined within this Plan Update.
- Continue to adopt fair and equitable traffic laws that will not be used to discriminate against cyclists, restrict their right to travel, or reduce their relative safety.

More information about this encouragement program can be found at: www.bicycleleague.org.



Report card from the Fall 2015 assessment by the League of American Cyclists for the City of Fitchburg

4.2 – Enforcement and Network Safety Recommendations

The following are recommendations specifically related to enforcement and safety for bicycling and walking in Fitchburg.

Safety Enforcement Methods

A variety of law enforcement methods can help change unsafe behaviors, making it easier for people of all ages and abilities to walk and bicycle in Fitchburg. Regardless of the method used, enforcement methods require consistency and follow-up in order to maintain effectiveness. To measure the effectiveness of an enforcement method, study behaviors before and after efforts. Studies may be as simple as measuring speeds or observing behavior of people driving, walking, and bicycling.

Speed Trailers and Active Speed Monitors

Portable speed trailers display drivers' real-time speeds compared to posted speed limits. Devices help reduce driver speeds and increase awareness of local speed limits. Speed trailers are most effective when they flash "slow down," or flash lights that mimic photo speed cameras or police cars when drivers surpass the speed limit. Some trailers have the ability to collect traffic data including vehicle counts and speed information, which can be used to identify times when additional enforcement may be needed. In some cases, back-up enforcement by police officers may be needed to stop and/or ticket individuals who are speeding.

Active speed monitors are permanent devices to keep drivers aware of speeds and remind them of the need to slow down. Speed monitors are typically displayed below speed limit signs, and visually display drivers' speed in real time as they pass.

Progressive Ticketing

Issuing tickets is the strongest enforcement strategy, and is usually reserved for changing unsafe behaviors that other strategies fail to change. Progressive ticketing is a method of introducing ticketing through a three-stage process: educating, warning, and ticketing. Progressive ticketing can apply to drivers, pedestrians, or bicyclists who exhibit unsafe behaviors.

Educate

First, community awareness of the problem must be established. Raising awareness of the issue will change some behaviors and will create public support for follow-up enforcement efforts.

Warn

Second, warn the public about actions to be taken and why by distributing flyers, posting signs, and sharing information using social and traditional media. Issuing warnings allows police to contact many more non-compliant motorists compared to writing citations. High frequency of stops also ensures that many other people witness warning stops, prompting them to obey the rules. Give people time to change behaviors before ticketing starts.

Ticket

Finally, after the "warning" time expires, clearly announce when and where ticketing operations will occur. If offenders continue to violate the law, officers begin writing tickets. Ticketing gives the program credibility by establishing police follow-through.

Speed Enforcement in School Zones

Strict enforcement of speed limits in school zones is one enforcement tool that can improve safety for students and families walking and bicycling to community destinations. Consistent enforcement in established school zones and near community destinations are useful approaches.

4.3 - Policy Recommendations

Considering and implementing a range of policy changes can create a lasting framework for facilitating walking and bicycling improvements in Fitchburg.

The following are recommendations specifically related to policy in Fitchburg.

BCycle Expansion

Madison's public bikeshare system, BCycle, allows residents and visitors to easily rent a bicycle from any of the 39 stations located throughout the downtown Madison area. The system is designed to encourage short trips by bicycle, and to allow people to easily access a bicycle without the cost or effort of owning and maintaining it.

Access to bike ownership, maintenance, and storage may be potential barriers for a portion of Fitchburg residents, especially for those living in multi-family housing where storage is limited. Providing access to a bicycle share system can also help people to more easily access this mode of transportation.

This plan recommends exploring a potential partnership with the City of Madison, local sponsors, and grant funders to expansion BCycle station locations to Fitchburg.

Priority locations are places where people are already bicycling or walking, where there is good access to bicycle facilities (such as the regional shared-use paths and trails), and places where people can easily connect with public transportation and to popular community destinations. Recommended corridors for BCycle expansion are:

- Fish Hatchery Road
- Verona Road
- Rimrock Road



Madison BCycle is piloting a tricycle option for commuters.

Photo: Madison BCycle

- McKee Road
- Beltline (Hwy 151/18) Frontage

Orienting Development to Trails and Ped/Bike Investments

Fitchburg has made important investment to provide pedestrian and bicycle connectivity in the city. An important opportunity to support the city's ongoing orientation towards a built environment that encourages Active Transportation is to develop and adopt policies that encourage appropriate economic and commercial development along the City's path and trail corridors. These investments, oriented toward and leveraging that bike and pedestrian traffic, can help grow walking and biking overall while also shaping the city's new growth toward more sustainable forms of development.

Adopt Downtown Thoroughfare Street Design Per NACTO Urban Street Design Guide

The Urban Street Design Guide, published by the National Association of City Transportation Officials (NACTO) in 2013, provides best-practice guidance for engineers planners, and designers working in cities all over the world. The Urban Street Design Guide takes into account all modes of transportation, with an emphasis on pedestrian and bicyclist safety.

A subsection of the guide describes a street typology called a Downtown Thoroughfare. Downtown Thoroughfares are major streets connecting neighborhood centers or which run through commercial areas, and have high traffic volumes. Major urban arterials with commercial strip development may be reconfigured using the recommendations described in the Downtown Thoroughfare subsection of the NACTO Urban Street Design Guide.

Roads like Fish Hatchery Road, McKee Road, or Verona Road may be good candidates for redesign as Downtown Thoroughfares. Additionally, intersections identified as Primary Intersections in the Pedestrian and Bicycle Network Recommendations could be candidates for Downtown Thoroughfare designs. Some of the recommendations for this street typology are:

- Assess left-turn volumes and evaluate the overall traffic network to determine whether left turns can be restricted or removed at a particular intersection
- Implementing a parking-buffered one-way cycletrack, applied on each side of the street to offer separation and added safety for bicyclists
- Integrating on-road bicycle facilities with public transportation stop design
- Focused design of intersections to result in the highest levels of safety for bicyclists and pedestrians, including signal phasing, curb and lane design, raised crossings, and buffers

More information can be found at: http://nacto.org/publication/urban-street-design-guide/streets/downtown-thoroughfare/



Example of a Downtown
Thoroughfare design, per NACTO
Urban Street Design Guide.

4.4 – Bicycle Parking Recommendations

Visible, secure bicycle parking is essential for making bicycling a viable option for transportation purposes. Most people will simply not bicycle to locations where parking isn't available. Others will improvise by locking bicycles to anything that seems secure. Attempts to lock to 'anything that doesn't move' can result in damage to fixtures including light posts and railings, and can also cause hazards to people walking.

Short-Term Bicycle Parking

Short-term parking accommodates visitors, customers, employees, and others who arrive at a destinations with the intention of leaving within a few hours. Standard inverted-U racks, securely anchored and placed near primary entries are recommended. Short-term parking is recommended for Fitchburg's neighborhood parks, schools, transit stations, employment centers, and commercial areas.

Long-Term Bicycle Parking

Long-term parking accommodates employees, students, residents, commuters, and multi-modal travelers. Long-term parking should be secure, weather-protected, and in a visible and convenient location. Long-term parking may be provided using inverted-U racks in a secure and supervised area, or by bicycle lockers, bicycle stations, or bicycle rooms. Long-term parking should be provided at schools, major transit hubs, and office areas.

Placement and Function

Parking areas should be visible and prominent, located near a building's main entry, and located clearly and conveniently along a bicycle riders' natural path to access a site.

More information about bicycle parking is available in Appendix A.

Expanding bicycle parking options in Fitchburg

Compared to other infrastructure-related improvements, bicycle parking is a relatively quick and inexpensive way to make bicycling easier.

Most new development in Fitchburg requires some bicycle parking, per SmartCode ordinances.

Table A.4 in Appendix A provides suggested guidance for the number of bicycle parking stalls to be installed per establishment type.

There are several steps the city can take to better accommodate bicycle riders' parking needs:

- Establish a policy for requiring bicycle parking as part of existing development throughout the City of Fitchburg.
- Create a "Request-a-Rack" program and/or bicycle rack cost-share program to add bicycle parking at local businesses.
- Provide guidance to businesses and property owners regarding rack selection and site placement.

4.5 – Facility Maintenance Recommendations

Walking and bicycling facilities should receive adequate maintenance to protect the investments made by the City of Fitchburg and its partners and to ensure that they continue to serve the needs of residents and visitors well into the future.

General Considerations: User Needs

People walking, especially people who use mobility aids, depend on a level, slip-resistant surface for travel. Walking surfaces that are free from unexpected bumps, holes or cracks, ice, or other slippery materials are paramount for people's safety and comfort. People walking also depend on motorists' ability to anticipate and respond to their presence when crossing streets.

Surfaces that are adequate for people driving can be treacherous for people walking or bicycling: gravel can deflect a bicycle wheel; a crack in the pavement or a poorly-placed utility grate can trap a wheel or trip walkers; wet leaves, ice, and gravel in walkways and bikeways can result in a fall, limit mobility for people requiring aids, and reduce system use.

Maintenance of travel ways (sidewalks, shared use paths, and on-street bicycle facilities), signs, signals, and pavement markings is important in providing a reliable network for people walking and bicycling.

Maintenance Budgets

Preventive maintenance reduces hazards and decreases future repair costs. Maintenance costs and responsibility for maintenance should be assigned when projects are planned and budgets developed. As with roadways, typical annual maintenance costs range from 3 to 5 percent of infrastructure replacement costs - for example, a \$100,000 facility should include a \$5,000 annual maintenance budget. Life-cycle cost analysis is recommended to determine the net



Keeping sidewalks free of obstructions, or providing detours during road construction can make pedestrian travel easier.

value of using longer-lasting, higher-quality materials during construction if they reduce yearly maintenance expenditures.

Management Plans

A management plan is a tool to identify maintenance needs and responsible parties. A management plan that includes the maintenance component for a proposed facility should be in place before construction. Additionally, a management plan should include a means for users of the system to report maintenance and related issues and to promptly address them.

A facility's management plan answers basic operational and staffing questions such as frequency of maintenance tasks and who is responsible for the following issues:

- Filling potholes
- Removing fallen trees or branches
- Responding to vandalism and trespassing
- Removing litter
- Replacing stolen or damaged signs
- Watering and weeding landscaping
- Acting as the main contact
- Covering expenses

User-Initiated Maintenance Requests

Users of Fitchburg's pedestrian and bicycle network will likely be the first to notice hazards, maintenance issues, and opportunities to improve the system. A formal mechanism for receiving requests for maintenance can help focus and prioritize investments, avert deterioration of the city's infrastructure investments, provide effective management, and reinforce resident-ownership of Fitchburg's non-motorized network assets.

Street Sweeping

Loose gravel, sand, leaves, and other debris on the surface of bicycle lanes, paved shoulders, and paved sections of shared use paths should be removed at least once a year, normally in the spring. Debris will tend to accumulate on bicycle lanes because automobile traffic will sweep these materials from the automobile portions of the roadway. This is especially true for bicycle lanes that are located directly adjacent to a curb, where debris collects already.

Markings

Signs and pavement markings are important features of walkways, bikeways and roadways, and help ensure continued safe and convenient use of these facilities. To be useful, bikeways signs, striping, and legends must be kept in a readable condition.

Some recommendations to address these infrastructure elements include:

- Regular inspection of bikeways signs and legends, including an inventory of signs to account for missing or damaged signs;
- Prompt replacement of defective or obsolete signs;
- Regular inspection of striping, and prompt reapplication as needed. Bicycle lanes may require annual re-striping if located on higher-volume streets; and
- Consider durable cold plastic for skip-striping bicycle lanes across right turn lanes.

Snow and Ice Removal

Snow removal is a critical component of pedestrian and bicycle safety. The presence of snow or ice on sidewalks, curb ramps, or bikeways will deter pedestrian and cyclist use of those facilities to a much higher degree than cold temperature alone.

Seniors and other vulnerable adults will avoid walking in locations where ice or snow accumulation creates slippery conditions that may cause a fall. Curb ramps that are blocked by ice or snow effectively sever access to pedestrian facilities for wheelchair users and seniors. Additionally, inadequately maintained facilities may force people walking or bicycling to take a route that is unsafe or inconvenient.

When the surface of a road is covered by snow, the pavement markings that guide and warn people walking, bicycling, or driving may be difficult to see. Clear snow from the entire roadway surface so pavement markings are identifiable, and people walking and bicycling can comfortably travel as far to the right as possible.



Maintain paint including crosswalks and bikeways against wear and tear.



A bicycle lane in need of re-striping.



Snow and ice removal during Wisconsin winters is critical for extending use of pedestrian and bicycle facilities throughout the year.

Prioritizing snow clearing operations

A useful approach for maximizing the efficiency of maintenance investments is to identify locations where accumulation of snow or ice would significantly impede pedestrian and bicycling access and safety so that these locations are prioritized for clearing immediately after a storm event.

Surface Repairs and Resurfacing

People walking and bicycling are more sensitive and more vulnerable to problems in the roadway surface than people driving. A smooth surface, free of potholes and other major surface irregularities, should be provided and maintained. Care should be taken to eliminate other physical problems. Requests for surface improvements could be made through the user-initiated maintenance request program described above.

Loose asphalt materials from patching operations often end up on the shoulder, where the larger particles adhere to the existing surfacing, creating a very rough surface for bicycling. Fresh loose materials should be swept off the road before they have a chance to adhere to the pavement.

Utility cuts can leave a rough surface for people bicycling if not back-filled with care. Cuts should be backfilled and compacted so that the cut will be flush with the existing surface when completed. Extra care should be used when cuts are made parallel to bicycle traffic to avoid a ridge or groove in the bicycle wheel track. Considerations should be given to adding these specifications to utility permit requirements.

Street resurfacing projects provide ideal opportunities to greatly improve conditions for people walking and bicycling by narrowing automobile travel lanes, widening shoulders, or adding bicycle lanes, for example. However, if not done correctly (by leaving a ridge or a joint in a shoulder or bicycle lane for example), conditions may worsen.



Uneven road surfaces can make riding a bicycle, even within a bike lane, uncomfortable.



Vegetation should be trimmed to minimize walkway/bikeways encroachments.

Program & Operations Recommendations

Items to consider on resurfacing projects that will help improve conditions for people walking and bicycling include:

- Gravel driveways and alleys should be paved back 5–10 feet from the curb or right-of-way to prevent gravel from spilling onto shoulders or bikeways.
- Loose gravel used during the installation process for chip seals creates hazardous bicycle riding conditions, especially in shoulder areas. Provide warning signs for bicycle riders as well as bicycle route detours during installation.
- Avoid leaving a ridge in the area where people ride bicycles, which occurs where an overlay extends only part-way into a shoulder or bicycle lane. If possible, the overlay should be extended over the entire surface of the roadway to avoid leaving an abrupt edge.

Stormwater Management

Drainage facilities may change grades and deteriorate over time. Ensuring that bicycle-safe drainage grates are located at the proper height greatly improves cyclist safety; it may sometimes be necessary to adjust or replace catch basins to ensure continued safe operations and improve drainage. The small asphalt dams that are sometimes constructed on roadway shoulders to divert storm-water into catch basins are a hazard to people bicycling, and their use should be avoided.

Event-related drainage issues (e.g. backed-up grates) and long-term drainage hazards (unsafe grates) can be reported through the user-initiated maintenance request program, and should be proactively addressed whenever street improvements are made.

Vegetation

Vegetation encroaching into and under a sidewalk, shared-use path, or trail crossing creates a nuisance and a hazard for people walking or bicycling, especially for those with sight or mobility impairments. Vegetation maintenance ensures smooth and clear pedestrian and bicycle travel areas and reduces visual barriers that could otherwise hinder user safety. City maintenance staff are generally responsible for vegetation management. Management needs should be considered during design and construction for long-term maintenance.

Vegetation management issues identified by users (e.g. tree roots causing heaving of sidewalk surfaces, encroachment and maintenance issues) can be reported to City of Fitchburg staff. A specific project has been recently identified to address the vegetation over-growth at the intersection of North Syene Road and McCoy Road.

4.6 – Evaluation and Performance Measure Recommendations

Performance measures are instruments that help assess the extent to which progress is being made in implementing a plan. They are a set of goals, trends or targets that are meant to be met at a certain point of time in the future. The following are evaluation and performance measure recommendations for the City of Fitchburg Bicycle and Pedestrian Plan - 2017 Update.

Review Plan Implementation Progress Annually

This Plan is intended to serve the City of Fitchburg for a five-year period, when either a new plan or a plan update will be developed and adopted. In the interim, City staff should review this Plan annually to track progress towards Plan goals and ensure timely implementation of Plan recommendations.

Gather / Evaluate Crash Data

Pedestrian and bicycle crashes should be tracked as best as possible. Fewer crashes per year would indicate an improved environment, especially if more people are walking and bicycling for their daily trips.

Data is currently tracked by the City of Fitchburg showing pedestrian and bicycle crashes, as well as other information related to the specific incidents. For this Plan, bicycle and pedestrian crash data from 2011-2015 was used to both facilitate conversation for community outreach, as well as informed plan recommendations. This data was derived from police reports and transferred to GIS mapping files. This plan recommends updating this GIS file yearly to keep up-to-date on increases and decreases in pedestrian- and bicycle-vehicle crashes.

Recommended Performance Measures:

It is recommended to keep an annual record of the following data:

- Number and location (intersections, on- or off-street locations) of pedestrian- and bicycle-vehicle crashes
- Severity of pedestrian- and bicycle-vehicle crashes
- Demographic information of people involved in pedestrian- and bicycle-crashes
- Safety audits at Primary Intersections and other intersections of concern

Optional Measures:

- Conduct an intercept or general community survey to get an overall sense of pedestrian, bicyclist, and driver sense of safety and comfort
- Conduct observation of pedestrian and bicycle use, as well as automobile compliance and awareness in targeted areas

Facility Use Data

Fitchburg can work with partner organizations and local businesses to establish a bicycle and pedestrian counting program. An increase in observed walkers or bicyclers would indicate an improved environment, especially if collisions involving people walking or bicycling decrease over the same period. An online survey can also be completed to assist with this evaluation.

Recommended Performance Measures:

It is recommended to keep an annual record of the following data:

- Percent of residents who walk or bicycle to work
- · Percent of students who walk or bicycle to school
- Percent of residents who walk or bicycle to other destinations
- Annual pedestrian and bicycle counts at important community destinations

Conduct Regular Walk and Bicycle Audits

As part of the process of creating this Plan, City of Fitchburg planning and engineering staff conducted a number of walk and bicycle audits, in coordination with the Bicycle and Pedestrian Advisory Committee. Groups of people, led by City staff, walked and bicycled specific routes together, taking notes and observations of the quality and comfort of the route, as well as identifying areas of discomfort or safety concerns. It is recommended to continue to organize walk and bicycle audits on a regular basis, both as a means to audit and measure improvements within the City for walking and bicycling, but also to build awareness and provide an opportunity for City staff to interact directly with residents surroundings issues of walking and bicycling.

Continue a Bicycle/Pedestrian Committee

The Bicycle and Pedestrian Advisory Committee (BPAC) was created to oversee the adoption of this Plan Update. As part of an on-going effort in the City of Fitchburg, an expanded group could continue to convene and work with City staff to address bicycle and pedestrian-related issues.

Network Facility Inventory

A system's physical facilities and network provide the foundation for increasing travel by foot or bicycle. Measuring progress in the implementation and development of facilities will help measure success in plan implementation, and provide additional context for understanding potential gains in user safety and facility use that may occur as new facilities are added.

Recommended Performance Measures

It is recommended to keep an annual record of the following data:

- Miles of new/existing sidewalks and trails
- Miles of new/existing on-street bicycle facilities
- Number of new/existing bicycle parking spaces
- Miles of gaps in pedestrian network
- Miles of gaps in bicycle network
- Percent of planned facilities installed

Active Living Index

The Active Living Index is an assessment tool designed to evaluate how conducive to active living a place is, and assigns a combined Active Living Score with three mobility components considered (walking, bicycling, and transit infrastructure.)

At the time of the writing of this Plan, much of the Urban Service Area of Fitchburg is showing scores between 10-30 (out of 100), with a few areas along Fish Hatchery Road showing scores closer to 50 (out of 100).

The City of Fitchburg has the opportunity to use this Active Living Index as a means to evaluate progress tracked in creating further accessibility for bicycling, walking, and transit. The Active Living Index in Dane County is maintained through a partnership between the Capital Area Regional Planning Commission, the City of Madison, and the Madison Area Transportation Planning Board.

http://cityofmadison.maps.arcgis.com/apps/webappviewer/index.html?id=6a19a38e00be441080923f1f2f862b22

5. Implementation

This chapter contains the following sections:

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|-----|---|----|
| 5.2 | Implementation of Network Recommendations | 80 |
| 5.3 | Implementation of Program Recommendations | 82 |

5.1 – General Approaches to Implementation

When adopted, the Fitchburg Bicycle and Pedestrian Plan - 2017 Update will be the guiding document for decisions made regarding bicycle and pedestrian facilities and planning for the City of Fitchburg.

A productive approach for implementing infrastructure and programming recommendations during that time period should include:

- Development of initial concepts for pedestrian and bicycle network improvements based on recommendations from this plan, guidance from City of Fitchburg staff and community, a review of existing conditions, and an analysis of existing conditions
- A "test-run" of new projects by installing temporary pilot/pop-up versions of proposed changes. Pilot projects provide opportunities to measure impacts and gather comments from community members before investing in a permanent infrastructure improvement. A few pilot projects to create temporary protected bike lanes have been identified by the community:
 - McKee Road between Fitchrona Road to the Badger State Trail
 - Fish Hatchery Road between McKee Road and Lacy Road
- Further refining of conceptual recommendations through additional engineering and land use analysis, as well as coordination with the local community.
- Funding support for implementation of this plan's recommendations from multiple sources. The City should work closely with Dane County regarding implementation of facilities along county roadways, as well as with the neighboring communities of the City of Madison, the Village of Oregon, and the City of Verona for roadways at City of Fitchburg borders.



Temporary installations, also known as pop-up, pilot, or tactical urbanism projects, are useful for testing new ideas. Image: Test-run for a protected bicycle lane (cycletrack) in Hopkins, MN.

5.2 – Implementation of Network Recommendations

Pedestrian and bicycle improvements are often implemented as part of larger streetscape and roadway improvements. For this reason, it is difficult to provide precise phasing recommendations for network implementation. Regardless, identifying priority areas and projects can be helpful in moving implementation forward fairly and effectively.

As much as possible, consider the following when selecting, designing, and implementing infrastructure recommendations:

- Coordinate pedestrian and bicycle improvements with scheduled road construction and repairs to avoid potential conflicts and take advantage of opportunities for simultaneous improvements.
- Street resurfacing, re-striping, and streetscape projects provide opportunities to stripe on-street bicycle facilities or improve off-street sidewalk and trail connections at minimal costs.
- Treatments that require special consideration and careful design include raised crosswalks, channelized turn lane improvements, neighborhood slow streets with traffic calming elements, bicycle-specific traffic signals, and refuge islands.
- Pursue additional funding to support the design, implementation, and maintenance of pedestrian and bicycle improvements on a regular, ongoing basis.
- Act on opportunities to include pedestrian and bicycle improvements as part of development and redevelopment projects, or through spot improvements.

Table 5.1 on the following page outlines the recommendations, timeline for implementation, and the champion or responsible agency for implementing the network recommendations described in Chapter 3.



Badger State Trail in Fitchburg.

Table 5.1 - Network Recommendations

| From Chapter 3.2 – Bicycle Route Network | | | | | | | |
|--|--|-----------------------------|--|--|--|--|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency | | | | |
| Bicycle Network Implementation | Work towards completing the network of primary and neighborhood bicycle routes (see pages 47 – 51) | Long-term (Year 4+) | City of Fitchburg staff and related committees | | | | |
| Bicycle Treatment at Intersections & Trail Crossings | Improve intersections and crossings per Table 3.1 (see page 48) | Long-term (Year 4+) | City of Fitchburg staff and related committees | | | | |
| Lighting of Trails and On-Road Facilities | Establish policies for providing lighting along on- and off-road facilities, and in tunnels and other areas along trails as needed | Short-term (Years 1–3) | City of Fitchburg staff and related committees | | | | |
| Bicycling on Sidewalks | Develop a city-wide policy establishing an appropriate age and speed at which a bicyclist may be allowed to ride on a sidewalk | Short-term (Years 1–3) | City of Fitchburg staff and related committees | | | | |

| From Chapter 3.3 – Pedestrian Route Network | | | | | | | |
|---|--|-----------------------------|--|--|--|--|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency | | | | |
| Pedestrian Network Implementation | Work towards completing the network and policy recommendations (see pages 52 – 56) | Long-term (Year 4+) | City of Fitchburg staff and related committees | | | | |
| Urban Design Amenities | Improve urban design amenities for pedestrians, especially in areas of Pedestrian Activity Areas, per Table 3.2 (see page 54) | Long-term (Year 4+) | City of Fitchburg staff and related committees | | | | |
| Street Crossings | Improve street crossings for pedestrians, especially in areas of Pedestrian Activity Areas and at Primary Intersections, per Table 3.2 (see page 54) | Long-term (Year 4+) | City of Fitchburg staff and related committees | | | | |
| Pedestrian Crossing Signals | Improve pedestrian crossing signals per Table 3.2 (see page 54) | Long-term (Year 4+) | City of Fitchburg staff and related committees | | | | |
| Sidewalks in New Developments | Continue to require installation of sidewalks in new developments and redevelopments per existing city ordinance/policy (Redevelopment constitutes "infill" development, or a change in intensity of use, to create a new building area. Redevelopment does not include resurfacing or rebuilding a street.) | As needed | City of Fitchburg staff and related committees | | | | |
| Traffic Calming | Explore development of Neighborhood Slow Streets and install traffic calming measures, such as speed bumps, traffic circles, and raised intersections in accordance with the City's Neighborhood Traffic Management Process. | Long-term (Year 4+) | City of Fitchburg staff and related committees | | | | |

5.3 – Implementation of Program Recommendations

The city's role in implementation of programming initiatives will vary depending on resources and capacity. The city may take the lead, provide support, or work in partnership with other organizations, neighborhood groups or local businesses to initiate and implement a diverse array of programs. For some programs, the City of Fitchburg may have little or no direct involvement, other than a statement of support or implication of support through this plan.

Programs implementation should occur in coordination with infrastructure implementation and evolve as needed in the long term to educate all roadway users on how to safely operate in shared spaces including travel-ways and intersections, promote use of new facilities through encouragement programming, and support network safety through enforcement and facility maintenance.

When working to implement programs, the City of Fitchburg can:

- Provide support to schools for further Safe Routes to School planning and programming implementation at the school-, district- and city wide levels;
- Leverage partnerships with governmental and non-governmental agencies, community organizations, and local businesses to support education and encouragement programming; and
- Work closely with local police to enforce traffic safety laws, lead safety workshops
 including community education classes or bicycle rodeos, and provide a positive
 example for safe driving and bicycling behavior.

Table 5.2 on the following pages outline the recommendations, timeline for implementation, and the champion or responsible agency for implementing the program described in Chapter 4.

Table 5.2 - Program Recommendations

| From Chapter 4.1 - | - Education and Encouragement Program Re | commendations | |
|--|---|-----------------------------|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency |
| Citywide Network Maps | Update and distribute Citywide Network Maps regularly | Yearly | Fitchburg Chamber of Commerce |
| Community Walking and Biking Events | Group bike rides with City of Fitchburg Staff | Yearly | City of Fitchburg staff and related city committees |
| Community Walking and Biking Events | Open Streets Events | Yearly | Local businesses, City of Fitchburg Chamber of Commerce |
| Community Walking and Biking Events | SIND/WAIN WOONS | | Local businesses, City of Fitchburg Chamber of Commerce |
| Strategic Kid-Friendly Walking and Biking Events | Provide a wide range of educational and encouragement programs at Regional, County, City, and Neighborhood scales, promoting youth walking and biking | Short-term (Years 1–3) | Leopold Elementary, City of Fitchburg staff and related committees, Fitchburg Police Department, Boys and Girls Club, Healthy Kids Collaborative, Dane County Safe Routes to School, neighborhood groups |
| Rider Incentive and Bicycle Friendly Businesses | Increase the number of Bicycle Friendly Businesses to (5) by 2020 | Long-term (Year 4+) | Local businesses, City of Fitchburg Chamber of Commerce, City of Fitchburg staff and related committees |
| Bicycle Friendly Cities Program | Ensure that there are bicycle education opportunities specifically for women, seniors, families, and other specific demographic groups | Short-term (Years 1–3) | Neighborhood groups, City of Fitchburg staff and related committees, City of Fitchburg Chamber of Commerce, health advocates, local businesses |
| Bicycle Friendly Cities Program | Expand Bicycle Month, Bicycle to Work Day and Bicycle to School Day activities and participation | Yearly | Neighborhood groups, City of Fitchburg staff and related committees, City of Fitchburg Chamber of Commerce |
| Bicycle Friendly Cities Program | Continue to adopt fair and equitable traffic laws that will not be used to discriminate against cyclists, restrict their right to travel, or reduce their relative safety | Short-term (Years 1–3) | City of Fitchburg Police Department, City of Fitchburg staff and related committees, neighborhood groups |
| Bicycle Friendly Cities Program | Apply yearly and strive for Gold-level Bike Friendly City Status | Long-term (Year 4+) | City of Fitchburg staff |

| From Chapter 4.2 – Enforcement and Network Safety Recommendations | | | | | | | |
|---|--|-----------------------------|--|--|--|--|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency | | | | |
| Speed Trailers and Active Speed Monitors | Consider temporary (speed trailers) and permanent (active speed monitors) for installation at critical locations for bicycle and pedestrian use (ie—Badger State Trail crossing at McKee Road) | Long-term (Year 4+) | City of Fitchburg staff and related committees, City of Fitchburg Police Department | | | | |
| Progressive Ticketing | Pilot progessive ticketing procedures at critical locations for bicycle and pedestrian use | Long-term (Year 4+) | City of Fitchburg Police Department | | | | |
| Speed Enforcement in School Zones | Strict enforcement of speed limits in school zones within the City of Fitchburg | Short-term (Years 1–3) | City of Fitchburg Police Department, Dane County Safe Routes to School, Verona Area Public Schools | | | | |

Table 5.2 - Program Recommendations (continued)

| From Chapter 4.3 – Policy Recommendations | | | | | | | |
|---|--|-----------------------------|---|--|--|--|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency | | | | |
| BCycle Expansion | Work with the City of Madison to expand bicycle share stations at critical locations in the City of Fitchburg | Long-term (Year 4+) | City of Fitchburg staff and related committees, City of Madison, local businesses and bicycle advocates | | | | |
| Economic + Commercial Development Encouragement | Encourage appropriate economic and commercial development opportunities – taking advantage of bike and pedestrian traffic – along the City's path and trail coridors | Long-term (Year 4+) | City of Fitchburg staff and related committees, City of Fitchburg Mayor and City Council | | | | |
| Downtown Thoroughfare Street Design | Adopt Downtown Throroughfare Street Design Per NACTO Urban Street Design Guide for specific commercial corridors | Long-term (Year 4+) | City of Fitchburg staff and related committees, City of Fitchburg Mayor and City Council, Transportation and Transit Committee | | | | |

| From Chapter 4.4 – Bicycle Parking Recommendations | | | | | | |
|--|--|-----------------------------|---|--|--|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency | | | |
| Bicycle Parking Policies | Establish policy requiring bicycle parking for existing development, continue to require bicycle parking for selected new development uses | Short-term (Years 1–3) | City of Fitchburg staff and related committees, City of Fitchgburg Mayor and City Council, Transportation and Transit Committee | | | |
| Bicycle Rack Encouragement | Create a bicycle rack cost-share program | Long-term (Year 4+) | City of Fitchburg staff and related committees, City of Fitchgburg Mayor and City Council, Transportation and Transit Committee, local businesses and bicycle advocates | | | |
| Bicycle Rack Education | Provide guidance to businesses/ property owners regarding rack selection and site placement | Short-term (Years 1–3) | City of Fitchburg staff and related committees, local businesses and bicycle advocates | | | |

Table 5.2 - Program Recommendations (continued)

| From Chapter 4.5 – Facility Maintenance Recommendations | | | | | |
|---|---|-----------------------------|--|--|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency | | |
| Maintenance Budgets | Include on-going maintenance within capital improvement project budgets | Short-term (Years 1–3) | City of Fitchburg staff and related committees | | |
| Management Plans | Require facility management plans for new developments | Long-term (Year 4+) | City of Fitchburg staff and related committees | | |
| User-Initiated Maintenance Requests | Develop a system for user-initiated maintenance requests for bicycle and pedestrian facilities, similar to the existing Neighborhood Traffic Management process | Short-term (Years 1–3) | City of Fitchburg staff and related committees | | |
| Street Sweeping | Consider bicycle lanes and on-street facilities with street sweeping/cleaning in Fitchburg | Short-term (Years 1–3) | City of Fitchburg staff and related committees | | |
| Markings | Conduct regular inspections of wayfinding signs, striping, and facilities for bicycles and pedestrians | Yearly | City of Fitchburg staff and related committees | | |
| Snow and Ice Removal | Prioritize and evaluate snow clearing operations for pedestrians and bicyclists | Yearly | City of Fitchburg staff and related committees | | |
| Surface Repair and Resurfacing | Enforce quality control for surface repairs and resurfacing projects | Yearly | City of Fitchburg staff and related committees | | |
| Stormwater Management | Replace bicycle-safe drainage grates as necessary throughout the City of Fitchburg | Long-term (Year 4+) | City of Fitchburg staff and related committees | | |

| From Chapter 4.6 – Evaluation and Performance Measure Recommendations | | | | | | |
|---|---|-----------------------------|--|--|--|--|
| Action/Program | Recommendation | Implementation Timeframe | Champion / Responsible Agency | | | |
| Review Plan Implementation Progress Annually | Review the Plan annually and pursue a complete Plan update in 2021–2022 | Yearly | City of Fitchburg staff and related committees | | | |
| GIS/Crash Data | Update GIS and crash data and maintain a crash database | Yearly | City of Fitchburg staff and related committees | | | |
| Facility Use Data | Conduct yearly modeshare surveys | Yearly | City of Fitchburg staff and related committees | | | |
| Walking and Bicycle Audits | Conduct regular walk and bicycle audits throughout the City of Fitchburg | Yearly | City of Fitchburg staff and related committees | | | |
| Bicycle/Pedestrian Committee | Continue to convene a committee to address bicycle and pedestrian related issues in Fitchburg | Short-term (Years 1–3) | City of Fitchburg staff and related committees | | | |
| Network Facility Inventory | Create and maintain data quantifying bicycle and pedestrian facilities | Yearly | City of Fitchburg staff and related committees | | | |
| Active Living Index | Increase the Active Living Score for the City of Fitchburg to 55 (average) by the year 2022 | Long-term (Year 4+) | City-wide effort | | | |

Appendix A – Infrastructure Toolkit

This chapter contains guidance on the following:

| Introduction | 1 |
|--------------------------------------|----|
| Facility Design and Selection Tables | 2 |
| Pedestrian and Bicycle Facilities | 6 |
| Intersection Treatments | 13 |
| Wayfinding and Signage | 26 |
| Bicycle Parking Guide | 29 |

Introduction

This toolkit supplements the Fitchburg Bicycle and Pedestrian Plan - 2017 Update, and includes a description of best practices for the development of bicycling infrastructure. The tools and approaches included are based on a survey of national applications and case studies, and provide guidance for improvements to street cross sections, intersections, and signals. This toolkit should not be the only resource to determine appropriate measures or infrastructure. Rather, it is part of an overall planning and engineering toolbox that includes the requirements and guidelines of state and local best-practices.

The following is a list of resources for bicycle and pedestrian infrastructure design and planning:

- Wisconsin Bicycle Facility Design Handbook http://wisconsindot.gov/Documents/projects/multimodal/bicycle/facility.pdf
- Wisconsin Bicycle Planning Guidance http://wisconsindot.gov/Documents/projects/multimodal/bicycle/guidance.pdf
- NACTO (National Association of City Transportation Officials http://nacto.org/
- AASHTO (American Association of State Highway and Transportation Officials) http://sp.www.transportation.org/Pages/Organization.aspx

Facility Design and Selection Tables

Tables A.1–3 and Figures A.1–2 may be referenced when investigating new routes and crossing improvements in Fitchburg related to bicycle facilities. The following Bikeways Design Selection Tables were developed using a combination of reference with best-practice standards presented by MnDOT, WisDOT, NACTO, and AASHTO, as well as direct guidance from the City of Fitchburg Public Works Department. Widths specified below are *minimum* recommended widths. Buffered bicycle lanes and protected bicycle lanes are recommended along primary routes whenever space permits. In addition, four lane roads with fewer than 18,000 ADT are ideal candidates for road diets: four-to-three lane conversion with potential bicycle lanes added.

Table A.I - Bikeways Design Selection for Rural (Shoulder/Ditch) Cross Section -Adapted from multiple sources* for Fitchburg, WI****

| Motor Vehicle ADT (2 Lane) | | <500 | 500-1,000 | 1,000-2,000 | 2,000-5,000 | 5,000-10,000 | >10,000 |
|---|-----------------------|--------------|--------------|-------------|--------------------------------|---------------|---------|
| Motor Vehicle ADT (4 Lane) | | N/A | N/A | 2,000-4,000 | 4,000–10,000 | 10,000–20,000 | >20,000 |
| | 25 mph | 4' PS or SLM | 4' PS or SLM | 4' PS | 4' PS | 4' PS | N/A |
| Motor Vehicle Speed | 30 mph | 4' PS or SLM | 4' PS | 4' PS | 4' PS | 4' PS | 4' PS |
| | 35–40 mph | 4' PS or SLM | 4' PS | 4' PS | 4' PS min., 6' PS preferred | 6' PS | 6' PS |
| | 45 mph and greater | 4' PS | 4' PS | 4' PS | 4' min., 6' preferred | SUP or 6' PS | SUP |
| PS = Paved Shoulder; SUP = Shared Use Path; SLM = Shared Lane Marking | | | | | | | |

Table A.2 - Bikeways Design Selection for Urban (Curb/Gutter) Cross Section -Adapted from multiple sources* for Fitchburg, WI****

| Motor Vehicle ADT (2 Lane) | | <500 | 500-1,000 | 1,000-2,000 | 2,000-5,000 | 5,000-10,000 | >10,000 |
|----------------------------|-----------------------|------------|-----------|-------------|-----------------|--------------------------|-------------------------------------|
| Motor Vehicle ADT (4 Lane) | | N/A | N/A | 2,000-4,000 | 4,000–10,000 | 10,000–20,000 | >20,000 |
| Motor Vehicle Speed | 25 mph | NSS or SLM | SLM | SLM | NSS or 4' BL | 4' BL | N/A |
| | 30 mph | NSS or SLM | NSS | NSS | 4' BL | 4' BL | 6' BL or 4' BL + 2' BuL |
| | 35–40 mph | 4' BL | 4' BL | 4' BL | 4' BL | 4' BL + 2' BuL or PBL | 6' BL + 2' BuL and SUP or PBL |
| | 45 mph and greater | 4" BL | 4' BL | 4' BL | 4' BL + 2' BuL | 4' BL + 2' BuL or PBL | SUP or PBL |

NSS = Neighborhood Slow Street***; BL = Bicycle Lane**; BuL = Buffer Lane****;

PS = Paved Shoulder; SUP = Shared-Use Path; SLM = Shared Lane Marking; PBL = Protected Bicycle Lane*****

^{*}Adapted from MnDOT Bikeways Facility Design Manual. Wisconsin Bicycle Facility Design Handbook, AASHTO, and NACTO guides, as well as through direct guidance from the City of Fitchburg Public Works Department.

^{**} Bicycle lane widths do not include the width of adjacent gutter pan.

^{***}Preferred ADT for neighborhood slow streets is below 3,000. Neighborhood slow streets are not recommended for 4 lane roadways.

^{****}While bicycle lanes with minimum widths are presented here as recommendations, consideration should be made about whether an onstreet facility with greater protection/separation from vehicles (such as buffered or protected bicycle lanes) is warranted based on local road conditions, destinations, and expected and desired bicycle ridership. Where possible, the highest level of separation between bicyclists and motor vehicles is preferred; the dimensions and facilities shown in this table are suggested minimum widths and facilities.

^{*****}Where possible, protected bicycle lanes should be integrated with a buffer. See page 8 for a description of protected bicycle lanes.

Table A.3 – Criteria for Crossing Treatments at Uncontrolled Locations*

| Roadway Configuration | # of lanes crossed to reach a refuge (1) | # of multiple threat lanes per crossing (2) | Roadway ADT and Posted Speed | | | | | | | | | | | | | | | |
|--|---|---|------------------------------|---|---|---|-----------------------|---|---|---|------------------------|---|---|-------------|-------------|---|---|-------------|
| | | | 1,500 – 9,000 vpd | | | | 9,000 – 12,000 vpd | | | | 12,000 – 15,000 vpd | | | | >15,000 vpd | | | |
| | | | ≤ 30 mph | | | | ≤ 30 mph | | | | ≤ 30 mph | | | ≥ 45 mph | | | | ≥ 45 mph |
| 2 Lanes (two way street, no median) | 2 | 0 | Α | В | С | Е | Α | В | С | Е | В | В | С | Е | В | С | С | Е |
| 3 Lanes w/ Raised Median | 1 or 2 | 0 or 1 | Α | В | С | Е | Α | С | D | Е | В | С | D | Е | С | D | D | Е |
| 3 Lanes w/ Striped Median | 3 | 0 or 1 | С | С | D | Е | С | С | D | Е | С | С | D | Е | С | D | D | Е |
| 4 Lanes (two way street, no median) | 4 | 2 | Α | D | D | Е | В | D | D | Е | В | D | D | Е | D | D | D | Е |
| 4 Lanes w/ Raised Median (5 Lanes w/ turn lanes) | 2 or 3 | 2 | Α | В | D | Е | В | С | D | Е | В | С | D | Е | С | С | D | Е |
| 6 Lanes (two way street with or without median) | 3 to 6 | 4 | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F |

NOTES: Painted medians shall not be considered a refuge for a crossing pedestrian. Similarly, a 4 foot wide raised median next to a left turn lane can only be considered a refuge for pedestrians if the left turning volume is less than 20 vehicles per hour (meaning that in most cases the left turn lane is not occupied while the pedestrian is crossing). A multiple threat lane is defined as a through lane where it is possible for a pedestrian to step out from in front of a stopped vehicle in the adjacent travel lane (either through or turn lane).

Treatment Descriptions

- A Install marked crosswalk
 - Specific Guidance: Install marked crosswalk with standard (W11-2) advance pedestrian warning signs; use S1-1 signs for School Crossing locations.
- B Install marked crosswalk with enhanced road-side and in-roadway (bollard mounted) signs
 Specific Guidance: Install marked crosswalk "State Law Yield to Pedestrian" signs mounted on in-roadway bollards; use standard (W11–2) advance pedestrian warning signs; use S1–1 signs for School Crossing locations.
- C Install marked crosswalk with enhanced signs and geometric improvements to increase pedestrian visibility and reduce exposure Specific Guidance: For 2 or 3-lane roadways, install marked crosswalk with "State Law Yield to Pedestrian" signs mounted on in-roadway bollards or median mounted signs or overhead (R1–9) signs; use standard (W11–2) advance pedestrian warning signs; use S1–1 signs for School Crossing locations. Add neckdowns or median refuge islands to shorten the pedestrian crossing distance and increase pedestrian visibility to motorists.
- D Install marked crosswalk with enhanced signs, user activated RRFBs, and geometric improvements to increase pedestrian visibility and reduce exposure.

 Specific Guidance: Install raised median refuge island (unless it is a one-way street or one already exists) to shorten the pedestrian crossing distance
 - Specific Guidance: Install raised median refuge island (unless it is a one-way street or one already exists) to shorten the pedestrian crossing distance and increase pedestrian visibility to motorists. [If a median refuge cannot be constructed on a two-way street, go to Scenario F]. Install marked crosswalk with "State Law Yield to Pedestrian" signs WITH pedestrian activated RRFBs mounted on the side of the roadway and on median mounted signs; use standard (W11–2) advance pedestrian warning signs; use S1–1 signs for School Crossing locations. Consider adding neckdowns at the crossing if on-street parking exists on the roadway and storm drain considerations will allow. [Note: If pedestrian volume falls above the RRFB limit line in 5.2.2.b and 5.2.2.c, consider HAWK beacon, pedestrian traffic signal, or grade-separated crossing.]
- E Do not install marked crosswalk at uncontrolled crossing. Determine if the speed limit can be effectively reduced to 40 mph AND a raised refuge median can be installed. If so, utilize Scenario D criteria above. If this is not possible, or if pedestrian volume falls above the RRFB limit line on 5.2.2.b and 5.2.2.c, consider HAWK beacon, pedestrian traffic signal, or grade-separated crossing.

 Specific Guidance: Consider HAWK beacon, pedestrian traffic signal or grade-separated crossing; application of these treatments will consider corridor signal progression, existing grades, physical constraints, and other engineering factors.
- F Do not install marked crosswalk at uncontrolled crossing with 3 or more THROUGH lanes per direction or where the speed limit is ≥ 45 mph and/or there is not a median refuge on a 5-lane crossing. Consider HAWK beacon, pedestrian traffic signal, or grade-separated crossing. Specific Guidance: Consider HAWK beacon, pedestrian traffic signal or grade-separated crossing; application of these treatments will consider corridor signal progression, existing grades, physical constraints, and other engineering factors.

^{*}Adapted from the 2011 City of Boulder, CO Pedestrian Crossing Treatment Installation Guidelines



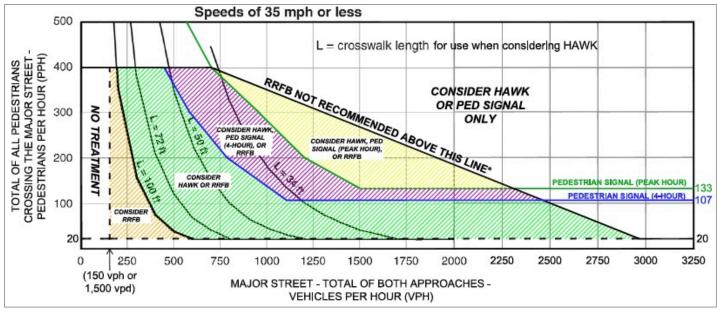
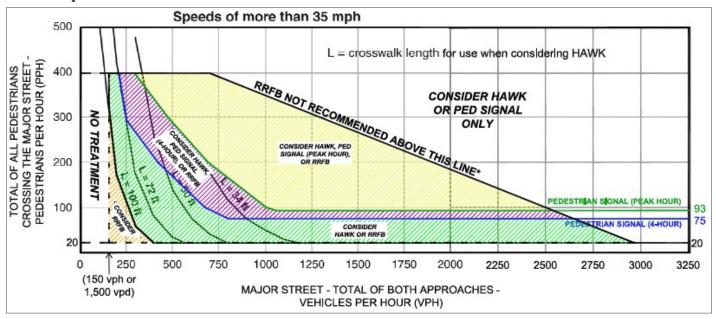


Figure A.2 – Guidelines for the Installation of Pedestrian Hybrid (HAWK) Beacons, Pedestrian Signals, or Rectangular Rapid Flash Beacon (RRFB) Signs on High-Speed Roadways*

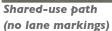


^{*}Adapted rom the 2011 City of Boulder, CO Pedestrian Crossing Treatment Installation Guidelines

Figure A.3 - Levels of Separation for Bicycle Facilities

Off-Street Bicycle Facilities (Shared-Use Facilities Shared with Pedestrians)







Shared-use trail (separated lanes)

On-Street Bicycle Facilities Not Shared with Motor Vehicles



Paved shoulder



Bicycle Iane



Buffered bicycle lane



Protected bicycle lane

On-Street Bicycle Facilities Shared with Motor Vehicles



Sharrow (shared-lane arrow)



Neighborhood Slow Street

Increasing Separation from Motor Vehicles

Note on application of facilities

In general, bicycle routes where higher motor vehicle traffic speeds and volumes are present should offer riders greater separation from motor vehicles. This will result in facilities that offer greater perception of safety and comfort to current and potential bicycle riders and will invite use by larger number of riders and through a greater range of ages and abilities.

Pedestrian and Bicycle Facilities

Bicycle Lanes

Description

Bicycle lanes designate a portion of the roadway for preferential use by bicyclists. Lanes are defined by striping, pavement markings and signage. Bicycle lanes create separation between bicycling and driving and increase comfort and visibility of people bicycling. On some roads, space availability may be a constraint; however, implementing a "road diet" (for example, by converting a four-lane roadway to three-lanes), or decreasing the width of travel lanes (down to 11 ft or 10 ft in urban settings) can often free up additional roadway space and provide a solution to this issue.

Application of Facility

- Bicycle lanes should be considered for streets that exceed 3,000 or higher motor vehicle average daily traffic (ADT); and
- Bicycle lanes should be paired with shared-use path on roads with speeds of 45 mph or greater and the following ADTs:
 - 2-Lane Road with ADT greater than 10,000; and
 - 4-Lane Road with ADT greater than 20,000.



A conventional bicycle lane in Saint Paul, Minnesota. Exclude the gutter pan width when measuring width of curbside bicycle lanes.

- Provide door zone clearance when bicycle lanes are located adjacent to parked vehicles.
- Apply bicycle symbol markings frequently to indicate that the space is a bicycle lane.
- Place pavement markings out of the path of turning vehicles to minimize wear.
- Minimum total width of 5' (including gutter). Example:
 - 4' bicycle lane + 1' gutter
- Preferred total width of 6' (including gutter). Examples:
 - 4' bicycle lane + 2' gutter
 - 5' bicycle lane + 1' gutter

Buffered Bicycle Lane

Description

Buffered bicycle lanes provide cyclists with extra space between bicycles and traffic, increasing comfort for bicycle riders. Buffers can provide cyclists with room to pass slower riders without having to merge into motor vehicle traffic. Buffered bicycle lanes also separate people from motor vehicle traffic as they exit and enter parked cars.

Application of Facility

- All locations where a bicycle lane is considered;
- On streets with higher travel speeds and/or higher travel volumes;
- On streets that provide additional lane width; and
- Buffered bicycle lanes may provide a safer and more comfortable designated bicycling space for parents with schoolchildren than conventional bicycle lanes and should be considered for routes serving school locations.



A buffered bicycle lane. This example has a buffer on the left for separation from moving vehicles and a buffer on the right for separation from parked cars (Park Avenue, Minneapolis).



A painted buffer provides extra distance between the bicycle lane and motor vehicle travel lanes on Portland Avenue in Minneapolis.

- Apply pavement markings frequently to identify that the space is designated for people bicycling.
- Color may be used at the beginning of each block to clearly indicate to motorists that the space is a buffered bicycle lane.
- Buffer is typically marked with 2 solid white lines with optional diagonal hatching of 3'.

Protected Bicycle Lane

Description

A protected bicycle lane (also known as a separated bicycle lane or cycletrack) is an exclusive space for bicycles separated from motor vehicle traffic by a painted buffer and a physical barrier (such as a curb, parked cars, or bollards). Protected bicycle lanes are separated and distinct from the sidewalk. Protected bicycle lanes significantly increase bicycle ridership for people of all ages and experience levels because the distinct separation from motorized vehicles greatly increases rider comfort.

Protected bicycle lanes also increase safety by reducing the likelihood of dooring crashes and potential conflicts from passing motor vehicles. They require more space and infrastructure than conventional bicycle lanes, and require special design attention at intersections. Separated bicycle lanes are the preferred on-street bicycle accommodation where the right-of-way space allows for its installation.

Removable bollards (also known as "candlesticks") can be used seasonally as a method for protecting bicycle lanes during the spring, summer, and fall. Removing the bollards during the winter months can alleviate conflicts with snow plow methods.

Application of Facility

- Along roadways with few cross streets, longer blocks, and limited driveways;
- Major roadways with medium to high motor vehicle traffic speeds and volumes; and
- Streets with parking lanes.



A painted buffer and bollards physically separate bicyclists using the two-way protected bicycle lane from motor vehicle traffic.



A protected bicycle lane in Missoula, Montana is physically separated from motor vehicle traffic by a curb and parallel parking. Image courtesy of bicycleleague.org.

- Design with consideration for intersections and driveways.
- Colored pavement may be used to define the lane.
- One-way protected bicycle lane width: 6' min. (not including buffer space).
- Two-way protected bicycle lane or cycletrack: 10' min. (not including buffer space).

Infrastructure Toolkit

Neighborhood Slow Street

Description

A neighborhood slow street (also sometimes known as a bicycle boulevard, neighborhood greenway, or shared street) is a lower volume, lower speed residential street designed to prioritize bicycle travel while encouraging motor vehicles to use other routes and maintaining relatively low motor vehicle speeds.

Application of Facility

- Residential streets where traffic calming is desired;
- Residential streets a block or two away from a major thoroughfare with high traffic volumes;
- Target speed for motor vehicle traffic on a bicycle boulevard should be no higher than 20 to 25 mph; and
- Motor Vehicle traffic volumes on a bicycle boulevard should be no higher than 3,000 ADT.

- Traffic calming devices (traffic circles, speed tables) will reduce motor vehicle speeds and create a safer environment for people walking and bicycling.
- Roadway markings should be used to designate the roadway as a bikeways and remind motorists to be mindful of people walking and bicycling.
- Wayfinding markers should be used to direct people bicycling to neighborhood slow streets from major thoroughfares and to alert motorists to the presence of bicycle riders.
- Signals, roundabouts, and/or median refuges should be used at major intersections when necessary to calm and/or redirect through traffic.



A traffic circle helps to calm traffic along a Neighborhood Slow Street.



The Riverlake Greenway Bicycle Boulevard in Minneapolis includes traffic diverters to reduce motor vehicle cut-through traffic.

Infrastructure Toolkit

Shared-Use Path / Trail

Description

Off-road shared-use paths (SUPs), also known as shared-use trails, provide separated space away from the street for non-motorized transportation users. These paths often link parks and other recreation destinations, and some serve broader regional connection purposes. Shared-use paths may run parallel to roadways, or away from streets in parks, along railways, and in wetland areas. Shared-use paths are generally very comfortable for users of all ages and abilities.

Application of Facility

- Along corridors where there is a sufficient width of continuous right-of-way and limited or controlled access
- Along roads with speeds of 45 mph or greater with the following traffic volumes:
 - 2-Lane Road with ADT greater than 10,000
 - 4-Lane Road with ADT greater than 20,000

- Minimum width should be 10'.
- Dual paths recommended along high speed / volume roadways, or roadways with limited crossing opportunities to minimize unsafe crossing behavior.



A shared-use path (SUP) in Eden Prairie, MN is separated from traffic with a wide vegetative buffer, and accommodates several types of users.



A shared-use path in Saint Paul, Minnesota offers separate lanes for people walking and bicycling.

Infrastructure Toolkit

Shared-Lane Markings

Description

Shared-lane markings (often called sharrows) are pavement markings used to communicate bicyclists' right to use the full roadway space for their travel. Sharrows help bicycle riders position themselves safely in travel lanes that cannot accommodate a bicycle lane or other facility. Sharrows may also be used to mark Neighborhood Slow Streets.

Priority shared-lane markings include additional colored paint or striping to bring further attention to the facility and highlight a bicyclist's placement and presence in the roadway.

Application of Facility

- Streets with fewer than 3,000 motor vehicles per day, and where right-of-way width does not allow a bicycle lane or protected bicycle facility;
- If right-of-way width allows room for a bicycle lane on only one side of the street, a sharrow may be used in downhill direction, with a bicycle lane in the "climbing" direction;
- Can be used to clarify bicyclist movement and positioning in challenging environments such as intersections and at a combined turn/bicycle lane; and
- May be used as a treatment for streets identified as Neighborhood Slow Streets.

- Typical bicycle-and-chevron symbol dimensions are 9'3" by 3'3".
- High frequency of markings indicate shared lane environment.
- Markings should be placed in the center of travel lanes and out of turning vehicles' paths to minimize wear from automobiles.
- Should not be used as a substitute for bicycle lanes where space allows.



Priority shared-lane markings include additional striping to further establish the route as a bikeways. Image courtesy of Boston.com



Green paint may also be applied to increase visibility. Image courtesy of MinnPost.com

Painted Bicycle Facilities

Description

Bicycle lanes are made more visible by painted pavement. This treatment distinguishes the lane from the rest of the roadway, making bicycle riders more visible. It is recommended that high-friction surfacing be used over standard paint because it is more slip-resistant and it doesn't have to be reapplied as often (standard paint has to be reapplied every year or two).

Application of Facility

- Within conventional, buffered, protected and shared bicycle lanes
- Corridors with heavy auto and bicycle traffic;
- Through busy and/or complex intersections and at conflict points, such as driveways;
- Use thermoplastic treatment with anti-slip characteristics - has a 7-8 year life expectancy; and
- Areas where illegal motor vehicle parking in the bicycle lane is common.

Color recommendation

PMS 375



- Provide signage to accompany pavement markings.
- Use green high-friction surfacing rather than paint.
- Consistency in coloring bicycle facilities is important. Green is standard in U.S. applications.
- Color can be provide in conflict areas alone, or throughout the facility.
- White border lines should be provided along the edges of the colored lane to maintain consistency with other bicycle facilities.



Green painted lanes through an intersection on the University of Minnesota campus in Minneapolis.



Green painted lanes approaching an intersection in Minneapolis. At this location, motor vehicles travel across the bicycle lane to turn right.

Intersection Treatments

Bicycle Box

Description

A bicycle box is a designated area for bicycle riders at the head of an intersection. Pavement markings guide motorists to stop a greater distance ahead of an intersection, allowing bicycle riders to move forward and stop in the bicycle box, increasing visibility and decreasing the risk of "right hook" crashes. This treatment also gives bicycle riders priority at a green light by allowing them to be the first to begin movement when a traffic signal turns from red to green. Ideally, bicycle boxes are paired with bicycle specific traffic signals.

Application of Facility

• Signalized intersections with high volumes of bicycles and/or motor vehicles, especially those with frequent bicyclist left-turns and/or motorist right-turns.

- Box may be ineffective without application of surface color.
- The box may be disregarded by motorists if it is not commonly filled by bicyclists.
- Box depth: 10' to 16'.
- Ingress bicycle lane should be used to define bicycle space and allow people bicycling to bypass stopped motor vehicles.
- High-visibility pavement markings and green-colored pavement surfacing should be used.
- "WAIT HERE" marking should be used to guide motorists to stop before the box.



A bicyclist approaching a bicycle box on the University of Minnesota campus in Minneapolis.



Bicycle boxes enhance the visibility of bicyclists and allow them to get out in front of motor vehicles at intersections. Image courtesy of streetwise.kittelson.com.

Bicycle Detection Systems

Description

Bicycle detection systems allow people bicycling to make movements through intersections in a timely way without requiring the detection of a motorized vehicle or push button. Detection systems include in-pavement loop detectors and mounted camera detectors.

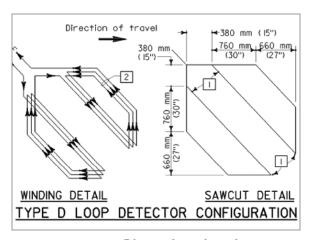
Loop detectors detect the presence of bicycles on the roadway. Detectors should be installed to cover areas of the road where people bicycling are likely to ride, including the right edge of travel lanes and the center of bicycle lanes. Pavement markings may be used to direct riders to the proper spot where their presence will be detected.

Cameras can be used to detect roadway users, including people bicycling. Once detected, a signal change is initiated to allow users to travel through the intersection. Hennepin County is installing camera detection technology when signals are upgraded or installed with the goal of providing camera detection at all signalized county road intersections.

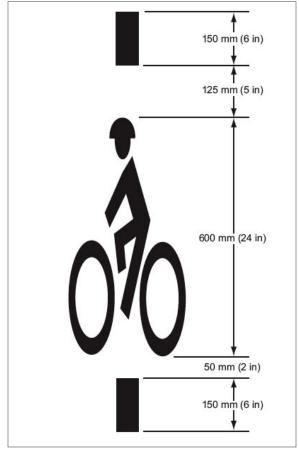
Application of Facility

- Implement appropriate detection whenever traffic signals are added or significantly upgraded;
- At intersections with traffic control;
- At intersections that require vehicle detection to initiate a signal change; and
- Crossings with traffic signals for bicycles.

- The most effective loop detection design is a Type D Loop, also known as a diagonal quadrupole pattern. This loop is sensitive over its entire width with a quick drop off in sensitivity outside its perimeter to avoid detection of vehicles in adjoining lanes.
- Sensitivity setting for the loop amplifier should be tested and adjusted to ensure that the detector can be activated by using only a bicycle wheel.



Diagonal quadrupole pattern. Image courtesy of California DOT.



Pavement marking recommended to encourage proper positioning of bicycles at loop detectors (Source: MN-MUTCD).

Bicycle Traffic Signals

Description

Traffic signals for bicycles are traffic control devices used to provide guidance specific to people bicycling at intersections. Bicycle signals are coordinated with motor vehicle signals to provide a protected crossing for bicycle riders at intersections, reducing stress and delays, and increasing safety and comfort. They also discourage illegal and unsafe crossing maneuvers.

Traffic signals for bicycles include:

- Bicycle Signal Heads and supplemental "Bicycle Signal" sign, clearly visible to oncoming bicycle riders (and motorists, if applicable);
- Signal detection and actuation; and
- Intersection crossing markings.

Application of Facility

 Intersections where high volumes of bicycle riders have to travel across roadways with high motor vehicle traffic volumes and/or speeds.

- Identify which signal treatment is appropriate by analyzing the factors involved: speed limit, average daily traffic, anticipated bicycle crossing traffic.
- Determine a clearance interval appropriate for the specific intersection.
- The bicycle clearance interval should be sufficient to accommodate at least 85% of bicyclists at their normal travel speed, including reaction time and acceleration from a stop.



A bicycle traffic signal in Minneapolis helps people bicycling to safely cross a busy street.



Push buttons for bicycle signals should be located at the edge of the curb facing the roadway so they can be easily accessed and activated by people bicycling.

High-Visibility Crosswalks

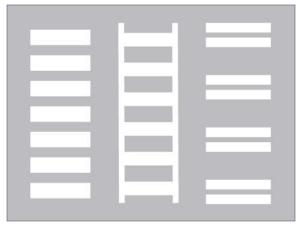
Description

Marked crosswalks help to create a continuous route network for people walking and bicycling by alerting motorists to their potential presence at crossings and intersections.

Application of Facility

- Should be used at fully-controlled intersections where sidewalks exist (all-way stop signs, traffic lights, or user-activated crossing beacons);
- Should be used where bicycle trails or shared-use paths cross a roadway; and
- Should not be used at uncontrolled crossings as a standalone device when speeds exceed 40 mph, to discourage unsafe crossings.

- Advanced stop bars should be considered when multiple motor vehicle travel lanes per direction are present in order to minimize risk of "hidden threat" crashes.
- Crossings marked with pavers are discouraged as they can be difficult for those with mobility impairments.
- High-visibility marked crossings are preferred because they are easier for motorists to see.
- Minimum markings consist of solid white lines between 6–24" in width (MUTCD).



Different types of high-visibility crosswalk markings.

Median Refuge Island

Description

Median crossing islands make crossings safer and easier by dividing them into two stages so that pedestrians and bicyclists only have to worry about crossing one direction of traffic at a time. Median crossing islands make high-volume roads safer and easier to cross, especially for slower walkers such as children and the elderly who might otherwise get stranded in the middle of the roadway. Space can sometimes be a constraint as crossing islands require the provision of a median in the center of the road.



Median crossing island on Bainbridge Island in Washington State. Image courtesy of FHWA.

Application of Facility

- Two-way, multi-lane roads;
- Roads with high traffic speeds and/or volumes; and
- Near schools, transit hubs, trails, shopping centers and employment centers.

- In addition to signage, trees and low ground cover increase visibility to alert drivers of the presence of the median island.
- Minimum width of 6'.
- Adequate lighting should be provided.
- Refuge area in the median should be angled so that users face traffic before crossing, while still allowing bicycle riders (when present) to navigate without dismounting.



A median refuge at the intersection of Franklin
Avenue W and Bryant Avenue S (a
Neighborhood Slow Street) in Minneapolis
makes it easier for people walking and bicycling
to cross Franklin Avenue W.

HAWK / Pedestrian Hybrid Beacon

Description

A Pedestrian Hybrid Beacon (more commonly known as HAWK or High-Intensity Activated crossWalK beacon) is a pedestrian-activated red-indication signal designed for locations where a standard traffic light does not meet traffic engineering warrants. The HAWK gives pedestrians a bicyclists a chance to comfortably cross busy roads at intersections or mid-block locations protected by an enforceable, red-indication signal for motorists.

The HAWK remains dark until activated by a pedestrian or bicyclist pressing the crossing button. Once activated, the signal responds immediately with a flashing yellow pattern that changes to a solid red light providing unequivocal "Stop" guidance to motorists. HAWK signals have been shown to elicit very high rates of motorist compliance. Cost for installation of a HAWK typically ranges from \$75,000 to \$150,000.

Application of Facility

- At crosswalks where no traffic signal is present;
- At mid-block or intersection locations; and
- The MUTCD (Chapter 4F) has guidance for applying a HAWK based on motor vehicle speeds and volumes, crossing length, and pedestrian volumes. Bicyclists are not specifically considered, however bicycle crossing volumes may be added to pedestrian crossing volumes for evaluation purposes.



A HAWK Beacon in Saint Cloud, Minnesota makes it easier for pedestrians and bicyclists to cross a busy street to reach a local park.

- Should include installation of a high-visibility crosswalk and advanced stop bar ahead of crosswalk.
- When used to facilitate bicycle movements, a bicycle signal head should be installed in addition to pedestrian signal heads. The bicycle signal head should display a flashing red to bicyclists when the hybrid is dark, allowing bicyclists to treat the intersection as a "stop" when the beacon is not activated.
- The MUTCD provides guidance on establishing the length of signal phasing.

Rectangular Rapid Flashing Beacon (RRFB)

Description

The Rectangular Rapid Flash Beacon (RRFB) is a highintensity flashing sign assembly that is placed ahead of a crosswalk. The RRFB is user-activated, and uses an irregular "stutter" flash pattern with very bright amber lights (similar to those on emergency vehicles) to alert drivers to yield to pedestrians who wish to cross.

The RRFB offers a higher level of driver compliance than other flashing yellow beacons, but lower than the HAWK signal. Installation cost ranges from \$10,000 to \$15,000 for two assemblies (for installation on each side of the street).

Application of Facility

- At crosswalks where no traffic signal is present;
- Suitable for two-lane roads (one assembly on each side of the street) and four-lane roads (one assembly on each side of the street and in the median or center island);
- Not compatible with three-lane approaches if roadsidemounted signs are used (due to potential line of sight issues / obstruction of signs); and
- FHWA permits the overhead placement of RRFBs, when it is not possible to achieve clear visibility of roadside signs; for placement, FHWA directs: "Only a minimum of one such sign per approach is required and it should be located over the approximate center of the lanes of the approach or where optimum visibility can be achieved."



An RRFB at a mid-block crossing alerts drivers when a pedestrian or bicyclist is crossing. Image courtesy of Michael Frederic.

- Employ RRFBs at crossing problem areas, school routes, or high volume routes.
- A beacon should be placed between the pedestrian crossing sign and the attached arrow plaque.
- For overhead signs, no arrow plaque is required.

Design Concepts for Protected Trail Crossings

Description

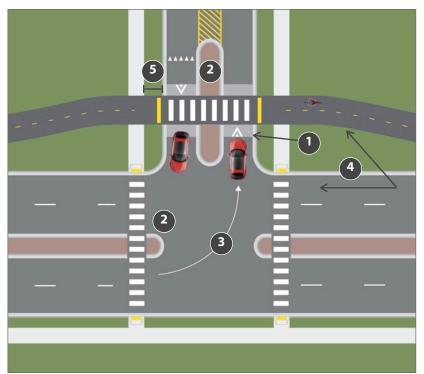
Common problems at trail crossings include:

- People walking and bicycling are blocked by motor vehicles which have inched forward and are preparing to turn onto the main road;
- Elevation changes at curb ramps and through the intersection affect walking and bicycling conditions; and
- High motor vehicle speeds as they turn from the main road and travel across the path crossings.

The concepts shown here address these issues by identifying measures that can, when used in combination, mitigate challenges for users. At a T-intersection, this concept sets trail crossings about 20 feet back from the parallel street (to provide space for motorists to queue up outside of the crossing when waiting for a gap in traffic), and provides a continuous path at a constant elevation for people walking and bicycling.

Additional components and configuration elements (including turning radius, medians, signs and markings) reduce the probability of drivers blocking the path of pedestrians and bicyclists, and provide traffic-calming benefits near the trail crossing.





Protected trail crossings are set back from parallel streets to provide room for motorists to queue up outside of the crossing.

Additional design elements include:

- 1) Speed table for the crossing
- 2) Medians and median extensions
- 3) Reduced turning radius
- 4) Clear sight triangle between motorists and trail users
- 5) 6 foot waiting zone.

Design Considerations

Crossing is pulled back 20 feet from parallel street

- Allows room for one vehicle to queue up, without blocking pedestrian or bicycle travel, to wait for a
 gap in traffic; and
- Allows sufficient distance for motor vehicles turning from the parallel roadway to see pedestrians or bicyclists using the crossing and to react and stop if needed.

Crossing is raised

- Addresses the issues of elevation changes affecting wheelchair users, pedestrians and bicycle riders at crossings;
- Calms traffic by functioning as a speed table, giving motorists more time to notice approaching pedestrians or bicyclists; and
- Discourages motorists from stopping on the crossing, maintaining a clear travel-way for trail users.

Medians and islands are provided, and include mountable curbs

 Channelize and calm motor vehicle traffic while allowing access for freight trucks and emergency vehicles.

Crossing is visible and legible

- Crossing location is visible and understood by all users of the road and path (appropriate pavement markings and signs are used); and
- Maintains clear and unobstructed sight lines at corners.

Turning radius is reduced

- Tightens corner radii and includes installation of median extensions to slow motor vehicles turning into and out of the intersection to/from all directions; and
- Accommodates freight vehicles and emergency vehicles with mountable curbs.

Additional Design Considerations

Additional design considerations for improved safety and functioning of crossings include:

- Speed table slope should be 1:10 except on emergency or freight routes when it can be lowered to 1:25;
- 6 feet waiting zone for path users between perpendicular path and curb; and
- Maintain a clear sight triangle between motorists and trail users at crossing approach.

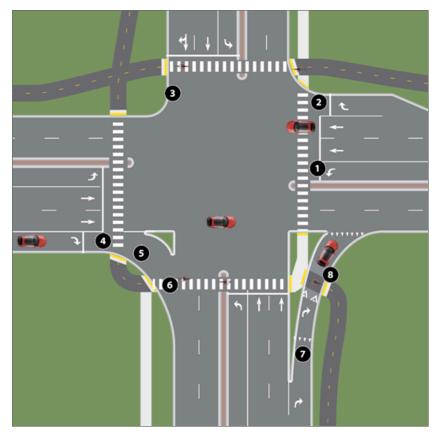
Design Concepts for Arterial Intersections

Description

Arterial intersections carry large volumes of motor vehicle traffic. Conventional geometric design for arterials, which focused on optimizing traffic flow for motor vehicles and did not fully consider the needs of other users, has negative implications for the safety, comfort and experience of people walking or bicycling through an intersection.

At locations where high numbers of people are expected to walk or bicycle, the roadway designer should strive to eliminate conflicts completely if possible, or to modify roadway designs to reduce motor vehicle speeds and make them more compatible speeds of people walking and bicycling (10-15 mph) at locations where conflicts cannot be avoided.

Figure A.5 - Components of Arterial Intersection Design



Design components:

- 1) Protected-Only Left Turn Signal Phase
- 2) Conventional Turn Lanes
- 3) Shared Right/Through Lane and Slow Speed Geometry
- 4) Protected Right Turn Signals
- 5) No Turn on Red
- 6) Leading Pedestrian Interval (LPI)
- 7) Pedestrian-Friendly Channelizing Islands
- 8) Other Channelized Turn Lane Enhancements

Design Considerations

Refer to Figure A.5 for illustration of each of the numbered characteristics below.

1) Protected-Only Left Turn Signal Phase

Exclusive left turn lanes should use protected-only signal phasing at intersections with trail crossings. This type of operation is recognized to provide the safest left-turn operation. Permitted-only or protected/permitted left turn phasing should not be allowed at crossings of high-priority bicycle and pedestrian routes.

2) Conventional Turn Lanes

Channelized turn lanes generally offer larger radius, higher speed turns than conventional turn lanes, which may pose a pedestrian and bicyclist safety issue (FHWA 2013). Conventional right turn lanes with smaller curb radii will reduce vehicular turning speeds, minimize pedestrian crossing distances, and reduce the potential severity of vehicle-pedestrian collisions. In situations where a right-turn lane is necessary, preference should be given to a narrow conventional turn lane with a small corner radii over a channelized turn lane.

3) Shared Right/Through Lane and Slow Speed Geometry

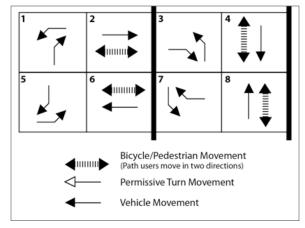
In areas with lower right turn volumes and lower speeds, a right turn only lane may not be warranted. By using a shared right/through lane in place of an exclusive right turn only lane, pedestrian crossing distance is decreased and turning speeds are reduced. The pedestrian signal commonly runs concurrently with the adjacent right/through lane. Because this creates a potential conflict between right turning vehicles and crossing path users, it is essential to use geometric design to create a slow speed turning movement. To design for slow speed turning movements, use a very small corner radius and narrow receiving lanes. Like intersections at T-intersections and minor streets, the crossing should be setback around 20 ft from the intersection.

A note on arterial intersection design recommendations

Please note that signalization, lane configuration and user volumes all have an effect on vehicle throughput, delay and safety. All intersections are unique, and there is no single typical design that can serve all needs. Each intersection requires review by a registered Professional Engineer to identify sight lines, potential impacts on traffic progression, timing with adjacent signals, capacity and safety for all users.

Notes and references

- FHWA Signalized Intersections: An Informational Guide, 2013
- TRB NCHRP 780: Design Guidance for Intersection Auxiliary Lanes, 2014
- TRB NCHRP 674: Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities, 2010



Simple Ring/Barrier Diagram for Protected but Concurrent Phasing.

4) Protected Right Turn Signals

At signalized intersections, right turn lanes are commonly served the circular green signal of the adjacent through lane. Assuming pedestrian signal phase occurs at this time, right turning vehicles are expected to yield for crossing pedestrians and bicyclists in the crosswalk.

Reconfiguring the signals to offer a protected right-turn phase may allow a fully protected pedestrian signal phase, allowing efficient and safe mobility for path users. Protected right-turn signalization may be established concurrently with the left-turn signal phase of the cross street, while the pedestrian signal phase is provided concurrently with the adjacent through movement. This type of "protected but concurrent" phasing provides the benefits of protected signalization without adding additional delay to the intersection that comes with exclusive phase operation (please see diagram on previous page).

5) No Turn on Red

The Minnesota Manual on Uniform Traffic Control Devices (MN-MUTCD) states that a No Turn on Red (NTOR) sign should be considered when an engineering study finds "an unacceptable number of pedestrian conflicts with right-turn-on-red maneuvers, especially involving children, older pedestrians, or persons with disabilities."

Given the likelihood and desire to support high volumes of bicycle and pedestrians along priority paths, an engineering study should be performed to evaluate the potential benefits of NTOR prohibitions at path crossings.

When right-turn-on-red is prohibited, there may be more right-turn-on-green conflicts between motor vehicles and pedestrians when both the right turning motorists have a green light and the pedestrian has the walk signal on the adjacent crosswalk. The use of leading pedestrian intervals can reduce this effect, and the use of protected signal phasing can eliminate it. Alternatives to NTOR prohibitions include "Yield to Pedestrian in Crosswalk," "Turning Vehicles Yield to Pedestrians," and "No Turn on Red When Pedestrians are Present."

6) Leading Pedestrian Interval (LPI)

At intersections with high pedestrian volumes and high conflicting turning vehicle volumes, a brief leading pedestrian interval, during which an advance WALKING PERSON (symbolizing WALK) indication is displayed for the crosswalk while red indications continue to be displayed to parallel through and/or turning traffic, may be used to reduce conflicts between pedestrians and turning vehicles. All path crossings at signalized intersections should be evaluated for leading pedestrian interval use where there is a desire to support high volumes of bicycle and pedestrian travel.

7) Pedestrian-Friendly Channelizing Islands

Whenever possible, channelized turn lanes should be avoided in pedestrian- and bicycle-oriented areas. If their use cannot be avoided, efforts should be made to mitigate their negative effects on these users.

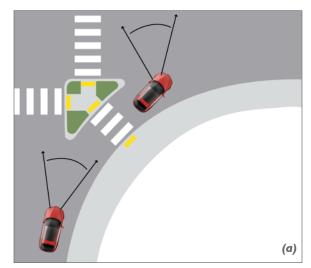
If channelized turn lanes and yield or free-flow operation is necessary, pedestrian-friendly geometry should be used to promote slow driver speed through the channelized turn lane and promote yielding of motor vehicles to people crossing the street.

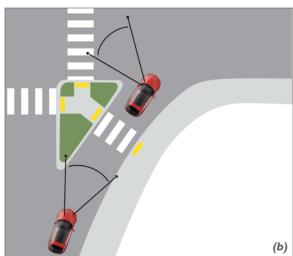
Channelizing island geometry should promote clear visibility of people in the crosswalk, and provide space for safe yielding to people walking, bicycling, or driving (TRB 2014). The alignment of the turn lane should be a nearly right-angle entry to the cross street, giving the channelizing island a shape like an acute right triangle. There should be adequate length of the turn lane to store yielding motor vehicles both before and after the crosswalk area.

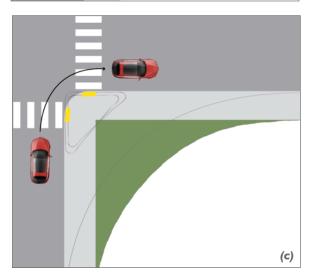
8) Other Channelized Turn Lane Enhancements

Channelized turn lanes can be particularly challenging to navigate for pedestrians with vision impairments (TRB 2010). Recommended strategies to assist these users include the use of raised crossings through the channelized turn lane to slow driver turning speeds and/or use of Rectangular Rapid Flash Beacons (RRFB) to improve yielding rates. These improvements also greatly benefit sighted users and should be considered where possible.

Each intersection/crossing has its own unique challenges. Concepts should be considered and implemented on a case by case basis.







(a) Vehicle speed is prioritized;
 (b) Pedestrian safety is improved as well as driver sight lines;
 (c) Removing channelized turns maximizes pedestrian space and minimizes turning speeds.

Wayfinding & Signage

Description

A bicycle wayfinding system is a comprehensive network of signing and pavement markings indicating destinations along preferred bicycle routes. Wayfinding signage encourages cycling by familiarizing riders with the bicycle network and by making it easier for cyclists to reach preferred destinations.

Confirmation Signs

Confirmation signs reassure bicycle riders that they are on a designated bikeways, and make motorists aware that they are driving on a route where they can expect to encounter bicyclists. They can include destinations, and possibly distance or time. They don't typically include directional arrows.

Confirmation signs are placed every quarter to every half mile on off-street facilities, and every 2 to 3 blocks along onstreet facilities, unless another types of sign is used (for example a turn or decision sign). Confirmation signs should be placed soon after turns to confirm destinations still ahead. Pavement markings also act as confirmation to bicyclists that they are on a designated route.

Turn Signs

Turn signs indicate where a bikeways turns onto a new street, or when a bicyclists should turn to reach a particular destination. Pavement markings can also be used for this purpose. Turn signs typically include destinations and arrows.

Turn signs are placed on the near-side of an intersection where a bicycle route turns. Pavement markings can also be used to indicate the need to turn.



Wayfinding signs should include clear destination, direction and distance information (in both time and miles). Image courtesy of bicyclemichiana.org.





Confirmation signage reassures bicyclists that they are on a designated route, and helps to make motorists aware of the route.



Turn signs indicate to bicyclists when they need to turn to reach a particular destination or stay on a designated route.

Decision Signs

Decision signs inform bicyclists of the designated bicycle routes that provide access to key destinations. Decision signs include destinations and directional arrows. Distances and travel time should also be included.

Three main components are needed for useful decision signs. They can be thought of as the 3 "Ds":

Destination

The destination is the main element, and communicates where things are that a bicycle rider may not have already known.

Direction

The direction component guides riders to their destination. The direction is indicated simply by using an arrow on the sign that directs users to proceed forward or to prepare to turn. Directional signage also gives motorists warning to expect cyclists on the road, and to anticipate cyclists' turning or crossing movements.

Distance

The distance and time component informs riders how long their trips will be, adding a measure of certainty and convenience when planning trips. Distance should be communicated in miles and time, calculated at a bicycling speed of 10 miles per hour.

Decision signs should be placed on the near-side of intersection in advance of a junction with another bicycle route, or along a route to indicate a nearby destination.



Decision signs are located at the intersection of one or more bikeways, and inform bicyclists of the designated routes that provide access to important destinations.



Pavement markings reinforce routes and direction signage. Image courtesy of share.america.gov.

Types of Destinations

Destinations that may be signed as part of a network wayfinding system include:

- On-street bikeways
- Commercial areas
- Schools
- Civic/community destinations
- Transit centers
- Local or regional parks and trails
- Hospitals

Before developing a wayfinding system, it is useful to classify a list of destinations for inclusion based on the relative importance to users in the area. A destination's place in the hierarchy may be used to determine the physical appearance of signs, as well as how far destinations are signed from their location.

In Fitchburg, primary destinations may be signed throughout the city (or even outside city limits), while secondary or tertiary destinations may be signed within a mile or two of the destination.

Pavement Markings

Pavement markings installed along dedicated routes help to reinforce routes and directional signage, and help bicyclists position themselves in the roadway. In many areas, pavement markings are more visible than signs to bicycle users, and can be especially helpful in areas where signage would be difficult to see including areas with parking or vegetation. They can also help to assist bicyclists in positioning themselves in difficult turning situations.

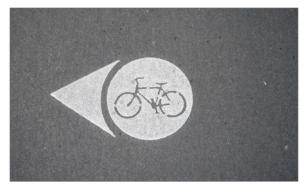
Pavement markings can also serve as confirmation and directional wayfinding. The use of stencils within bicycle lanes and along bicycle boulevards reinforces the designation of the route as a bicycle corridor. The chevron symbol for shared-lane markings can also be applied at an angle to indicate to bicyclists when they need to turn to stay on a designated route.



Pavement markings can also be used to indicate to bicyclists when and where they should turn.

Green turn boxes help bicyclists position themselves during two-stage turns.

- Provide information on destination, direction and distance (in miles and in minutes, calculated at speed of 10 mph).
- Decision signage should be placed in advance of all decision points.
- A consistent font, such as ClearviewHwy, is recommended for maintaining consistency with other road signs.
- The frequency of wayfinding signs is important. Confirmation signs should be placed every 1/4 to 1/2 mile along off-street bicycle routes and every 2 to 3 blocks along on-street routes.



Route dots may be used to indicate a turn along a bicycle route.

Bicycle Parking Guide

Bicycle parking is an end of trip facility that makes it more convenient and inviting for people to arrive by bicycle to a destination.

Provision of adequate bicycle parking cannot be overlooked: if bicycle parking spots are inadequate or if finding them is enough of an inconvenience, cyclists will next time choose a different mode for arriving or may choose another destination altogether, even if the provided bicycle routes are perfectly safe and convenient.

Application of Facility

- Choose a style that allows secure locking of the bicycle (frame and front wheel) to the rack without need of lifting the bicycle. The "Inverted U" and "Post and Loop" style bicycle racks are preferred.
- Locate bicycle parking with consideration for the rack's proximity to the building entrance it serves, its placement along the natural path used by cyclists to approach the building, and its visibility from both the interior and exterior of the building.
- Provide an adequate number of racks to meet the needs of people visiting the area.

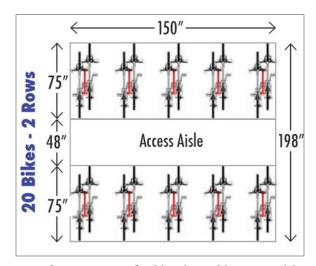
Additional Details

Generally, there are three components to bicycle parking:

- 1) The type or design of the bicycle rack itself, which supports the bicycle;
- 2) The location of the rack area, including its relationship to the building entrance it serves and the cyclists' approach to that entrance; and
- 3) The design of the rack area (the "bicycle parking lot"), which may include several individual bicycle racks.



Two of the preferred types of bicycle rack: the "Inverted U" (left) and the "Post and Loop" (right).



Arrangement of a bicycle parking area with parking for 20 bicycles and a central aisle for circulation. Image courtesy of Dero Bicycle Racks.

The Bicycle Rack

The rack should support the bicycle upright by its frame in two places, enabling the frame and one or both wheels to be secured while preventing the bicycle from tipping over. Additionally, it should not require a cyclist to lift their bicycle to be able to lock it securely - a useful rack design should allow a cyclist to roll-in or back-in their bicycle to lock it.

The Rack Area

The rack area is the "bicycle parking lot" defined by the racks and the space needed to access the racks. To be functional and useful, certain minimum clearances and access rules should be observed:

- Individual racks should be located no closer than 30 inches to each other in order to allow sufficient space for easy entry and removal of bicycles on either side.
- No rack element should be closer than 24 inches to a wall or other obstruction in order to allow full usability and easy access to perimeter racks.
- Large rack areas, or rack areas with high turnover, should provide more than one entrance to ease circulation of cyclists and pedestrians.
- Rack areas should preferably offer protection from rain and snow in order to ease loading and unloading of bicycles and to keep bicycle saddles dry.
- When multiple rows of bicycle racks are provided, the circulation space provided from the wheel of a bicycle on one row to the closest wheel of a bicycle on the next row should be a minimum of 48 inches.

Location of the Rack Area

One of the most important considerations in providing useful and functional bicycle parking is the location of the rack area in relation to the building it serves. Some guidelines for locating the rack area include:

- The recommended location for a bicycle parking area is immediately adjacent to the
 entrance it serves, preferably within 50 feet. It should be located as close as possible
 without blocking the entrance or hindering pedestrian movement to or from the
 building.
- The rack area should be clearly visible from the entrance it serves and from the building's approach line.
- Bicycle rack areas should be as close or closer than the nearest car parking space.
- Buildings with multiple active entrances should include bicycle rack areas at each entrance.
- Racks that are hard to find, are far from principal entrances, or perceived to be unsafe will not be used by cyclists.

Minimum Parking Guidelines

The following table provides guidance regarding the number of bicycle parking spaces that should be provided in areas of Fitchburg that do not need to comply with SmartCode, which has separate requirements.

Table A.4 - Non-SmartCode Bicycle Parking Guidelines

| Type of use | Short term parking | Long term parking |
|--|--|--|
| Commercial | Office: 1 space for each 15,000 ft ² ; minimum 2 spaces | 1 space for each 10,000 ft ² ; minimum 2 spaces |
| | Retail: 1 space for each 8,000 ft ² ; minimum 2 spaces | |
| Multifamily residential | 0.05 spaces for each bedroom; minimum 2 spaces | 0.5 spaces for each bedroom |
| Institutional / public uses (libraries, hospitals, parks, religious uses, etc) | 1 per 8,000 ft ² ; minimum 6 spaces | 1 space per 25 employees; minimum 2 spaces |
| Institutional Assembly (Auditoriums, Religious Gathering Spaces) | Spaces to equal 2% of assembly seating capacity; minimum 2 spaces | 1 space per 20 employees; minimum 2 spaces |
| Parks and Recreational Space | 1 space per 10 automobile stalls; minimum 4 spaces | None required; consider minimum 2 spaces at facility offices or public building entrance |
| Manufacturing, industrial | None required; consider minimum 2 spaces at public building entrance | 1 space for each 25,000 ft ² ; minimum 2 spaces |

B – Facility Cost Estimates

Introduction

The following table is provided as a first step toward estimating probable costs for implementation projects so that decision makers are able to make informed decisions when dedicating funding and investing in infrastructure improvements. It is important to note that the following figures are rough cost estimates. Actual costs will depend on specific roadway conditions and context, local contractors and suppliers, and other external factors. Costs are assumed to include engineering, design, mobilization, and furnish and installations costs.

Specific assumptions for estimating purposes (where linear length of sidewalk, bikeways, or bicycle lanes, etc. are used) include:

- All bicycle lanes are five feet in width;
- Wide curb lanes are four feet in width;
- Shared-use paths are asphalt and ten feet in width; and
- All sidewalks are six feet in width and have a thickness of four inches.

Additional information is available at:

 http://www.pedbicycleinfo.org/cms/downloads/Countermeasure %20Costs Report Nov2013.pdf

Table B.I – Implementation Cost Estimates

| Treatment | Unit | Unit Cost |
|---|------|-----------|
| General cost per type of facility | | |
| Sidewalk | LF | \$32.40 |
| Shared-use path (new) | МІ | \$202,720 |
| Conventional bicycle lane (no parking) Includes one line on each side of street, 20 symbols per mile | MI | \$17,200 |
| Buffered bicycle lane (no parking) Includes two lines (buffer) on each side of street, cross hatching in buffer, 20 symbols per mile | MI | \$29,480 |
| Neighborhood Slow Street (assumes 8 blocks/mile) Includes 16 symbols, 16 sign assemblies, 6 curb extensions, and 1 mini traffic circle per mile. | MI | \$44,400 |
| Striping | | |
| 4" Dashed | LF | \$0.75 |
| 6" Dashed | LF | \$1.00 |
| 8" Dashed | LF | \$1.25 |
| 4" Solid | LF | \$1.00 |
| 6" Solid | LF | \$1.50 |
| 8" Solid | LF | \$2.00 |
| "Zebra" striped crosswalk (thermoplastic) | LF | \$120.00 |
| Pavement Markings | | |
| Bicycle lane symbol (paint) | EA | \$75.00 |
| Bicycle lane symbol (thermoplastic) | EA | \$200.00 |
| Shared lane marking (thermoplastic) | EA | \$275.00 |
| Green bicycle lane (paint) | LF | \$19.00 |
| Colored pavement (thermoplastic) | SF | \$10.00 |

Table B.I – Implementation Cost Estimates

| Treatment | Unit | Unit Cost |
|--|------|-----------|
| Intersection treatments / traffic calming | | |
| Median extension for pedestrian refuge (6 ft x 8 ft) | EA | \$5,000 |
| Curb extension / Bump-out (6 ft x 20 ft) | EA | \$7,000 |
| Pedestrian refuge island, small (1100 sf) | EA | \$12,000 |
| Pedestrian refuge island, large (2300 sf) | EA | \$25,000 |
| Speed hump (raised crossing) | EA | \$2,500 |
| Traffic circle (neighborhood traffic circle) | EA | \$8,000 |
| Signs, signals, and wayfinding | | |
| Wayfinding sign (including post and base) | EA | \$400 |
| Regulatory/warning sign (including post and base) | EA | \$300 |
| Rectangular Rapid Flash Beacon (RRFB) * | EA | \$15,000 |
| Pedestrian hybrid beacon (PHB / HAWK) | EA | \$100,000 |
| Bicycle signal | EA | \$10,000 |
| Loop detector | EA | \$1,500 |
| Other | | |
| Bicycle parking (inverted U) | EA | \$190 |
| On-street bicycle corral (for 10 bicycles) | EA | \$1,800 |
| Street lights | EA | \$3,700 |
| Bollard | EA | \$150 |
| Underpass | LF | \$4,000 |
| ADA Curb ramp | EA | \$1,500 |

^{*} RRFB estimated unit cost includes assembly of RRFB / sign on both sides of the street.

This chapter contains the following sections:

| Introduction | 1 |
|--|----|
| Web Survey and Results | 1 |
| BPAC Meetings | 14 |
| Open House/Workshop/Listening Sessions | 47 |

Introduction

Public outreach and engagement was conducted in coordination with the City of Fitchburg and its Bicycle and Pedestrian Advisory Committee (BPAC). BPAC is an adhoc committee appointed by Mayor Steve Arnold to advise and oversee the direction of the Fitchburg Bicycle and Pedestrian Plan - 2017 Update.

Using online and in-person methods, the project team connected with and listened to Fitchburg residents to receive comments and guidance about existing conditions, user routes, needs and destinations, and to help identify priorities for bicycling and walking. The goal of the community engagement process was to work directly with the public throughout the planning process to ensure that public concerns and aspirations are consistently understood and considered.

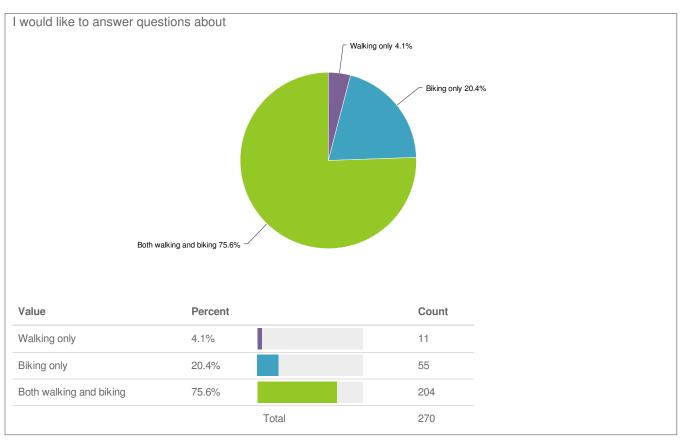
The following items related to the web survey, BPAC meetings and Open House/Workshop/Special Session meetings are intended to supplement the information summarized in Chapter 1: Approach of this document.

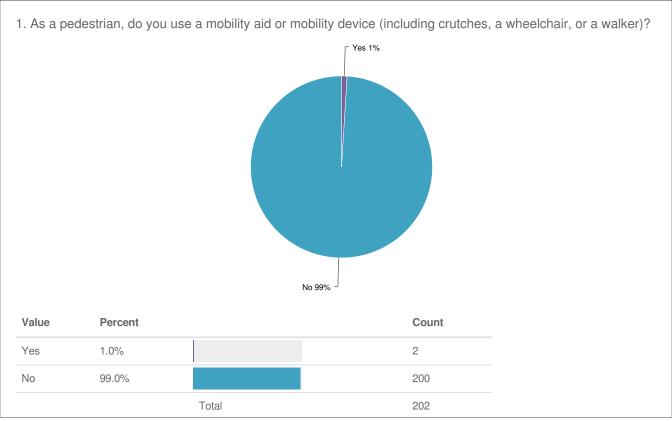
Public Opinion Web Survey and Results

A brief, voluntary survey was developed to gather specific information from individuals regarding their experiences walking and bicycling in Fitchburg. The survey was also used to identify barriers and opportunities for bicycling and walking.

Availability of the survey was noticed on the City's website, the City's TV station and in the Fitchburg Star newspaper, and to all City neighborhood association presidents, various city email listservs, and relevant city committees, boards, and commissions.

The following pages show the survey questions and full results.





From May through October (the warmer months), how often do you walk for the following reasons? Please provide one answer for each horizontal row.

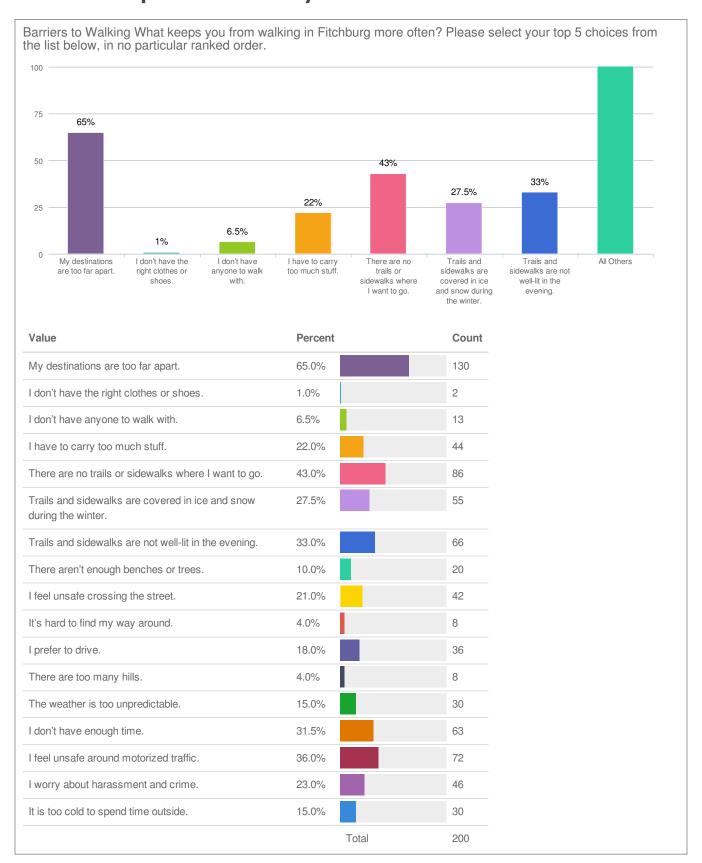
| | Never | Once a month | Once a week | 2-3 days a week | 4 or more days a week | Responses |
|---|------------------|--------------------|--------------------|--------------------|-----------------------|-----------|
| For pleasure or exercise | 4 2.0% | 7 3.5% | 23 11.6% | 58 29.3% | 106 53.5% | 198 |
| To visit friends and relatives | 79 42.2% | 42 22.5% | 37 19.8% | 16 8.6% | 13 7.0% | 187 |
| To go shopping | 110 59.1% | 36 19.4% | 21 11.3% | 13 7.0% | 6 3.2% | 186 |
| To go to restaurants and bars | 78 41.5% | 68 36.2% | 23 12.2% | 15 8.0% | 4 2.1% | 188 |
| To go to cultural, religious, or community events | 84 44.7% | 71 37.8% | 24 12.8% | 7 3.7% | 2 1.1% | 188 |
| To go to work | 148 81.3% | 7 3.8% | 6 3.3% | 6 3.3% | 15 8.2% | 182 |
| To go to school | 166 90.7% | 2 1.1% | 1 0.5% | 6 3.3% | 8 4.4% | 183 |
| To get to a bus stop or train station | 153 82.3% | 18 9.7% | 4 2.2% | 4 2.2% | 7 3.8% | 186 |

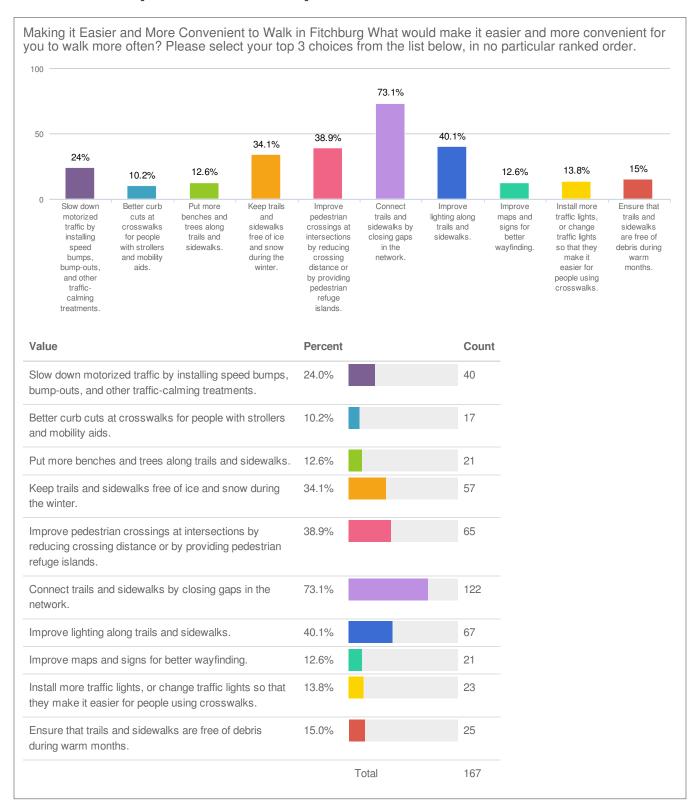
What destinations should be prioritized in Fitchburg to improve walking conditions? Please Rank the following destinations from most (top) to least (bottom) important:

| | Score* | Overall Rank |
|---|--------|--------------|
| Parks and trails | 893 | 1 |
| Schools | 739 | 2 |
| Residential neighborhoods | 732 | 3 |
| Libraries and community centers | 673 | 4 |
| Shopping, dining, and entertainment areas | 622 | 5 |
| Transit stops and stations | 508 | 6 |
| Places of work | 381 | 7 |

Total Respondents 177

*Score is a weighted calculation. Items ranked first are valued higher than the following ranks, the score is the sum of all weighted rank counts.





From May to October (the warmer months), how often do you ride a bike for the following reasons? Please provide one answer for each horizontal row.

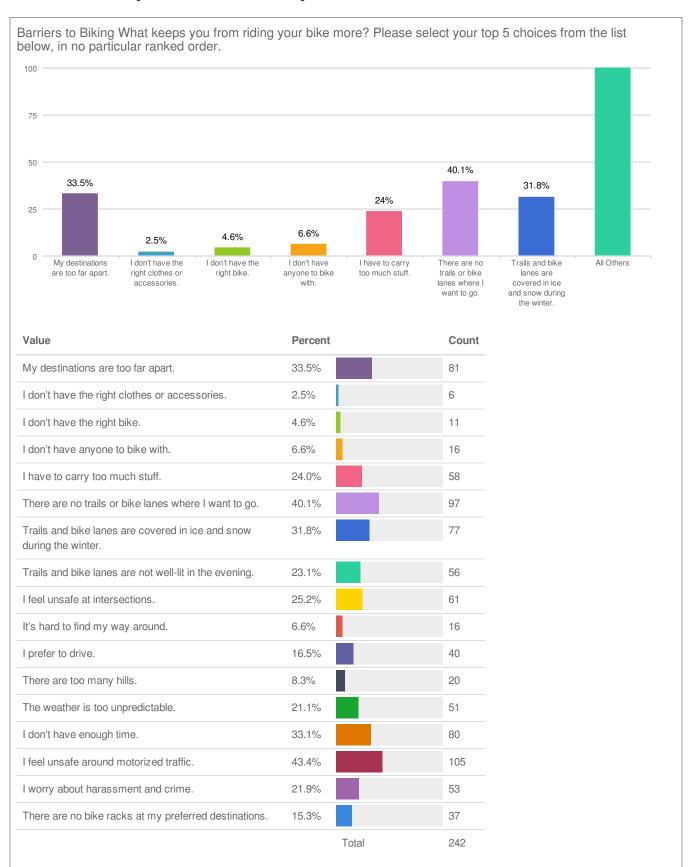
| | Never | Once a month | Once a week | 2-3 days a week | 4 or more days a week | Responses |
|---|------------------|--------------------|--------------------|--------------------|-----------------------|-----------|
| For pleasure or exercise | 19 7.7% | 37 15.0% | 44 17.8% | 74 30.0% | 73 29.6% | 247 |
| To visit friends and relatives | 100 42.4% | 70 29.7% | 34 14.4% | 20 8.5% | 12 5.1% | 236 |
| To go shopping | 115 49.8% | 58 25.1% | 39 16.9% | 10 4.3% | 9 3.9% | 231 |
| To go to restaurants and bars | 110 46.8% | 70 29.8% | 30 12.8% | 17 7.2% | 8 3.4% | 235 |
| To go to cultural, religious, or community events | 121 52.6% | 60 26.1% | 36 15.7% | 8 3.5% | 5 2.2% | 230 |
| To go to work | 127 53.4% | 22 9.2% | 23 9.7% | 26 10.9% | 40 16.8% | 238 |
| To go to school | 208 90.8% | 5 2.2% | 4 1.7% | 6 2.6% | 6 2.6% | 229 |
| To get to a bus stop or train station | 207 90.4% | 10 4.4% | 6 2.6% | 3 1.3% | 3 1.3% | 229 |
| To go further than the city limits of Fitchburg | 59 24.7% | 43 18.0% | 29 12.1% | 54 22.6% | 54 22.6% | 239 |

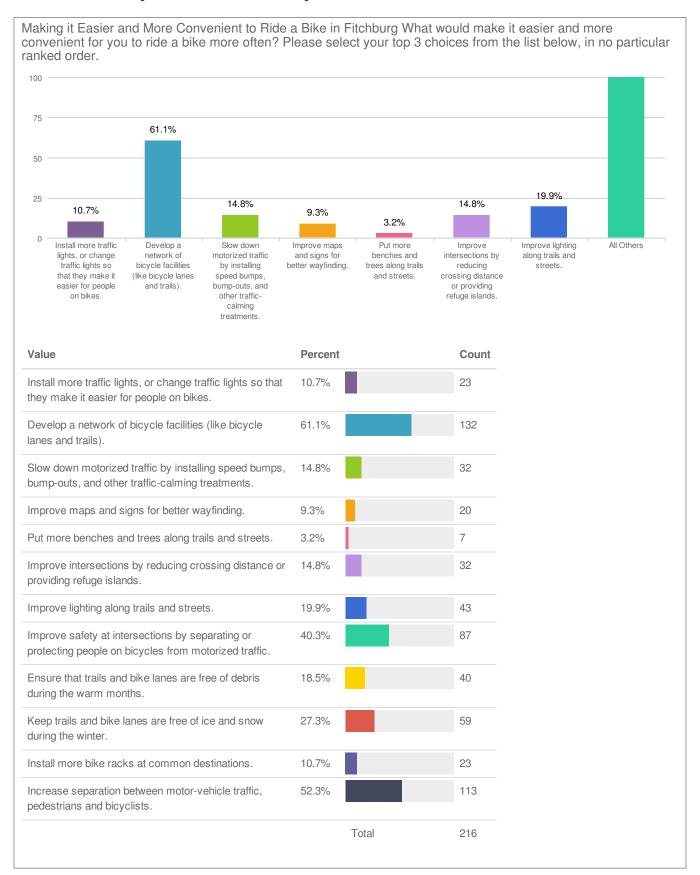
What types of destinations should be prioritized in Fitchburg to improve biking conditions? Please Rank the following types of destinations from most (top) to least (bottom) important:

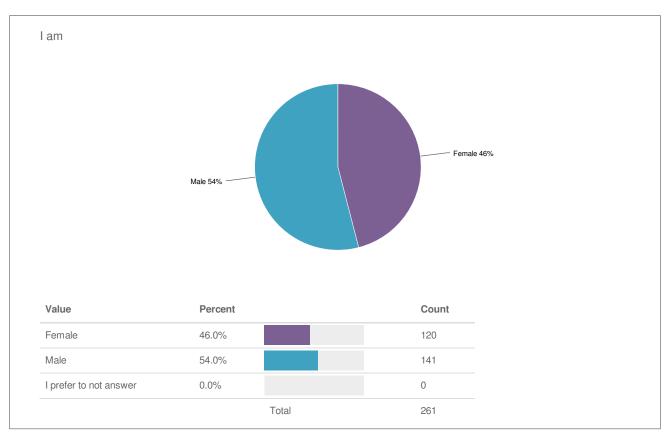
| | Score* | Overall Rank |
|---|--------|--------------|
| Parks and trails | 1186 | 1 |
| Schools | 838 | 2 |
| Libraries and community centers | 802 | 3 |
| Shopping, dining, and entertainment areas | 785 | 4 |
| Residential neighborhoods | 762 | 5 |
| Places of work | 748 | 6 |
| Transit stops and stations | 514 | 7 |

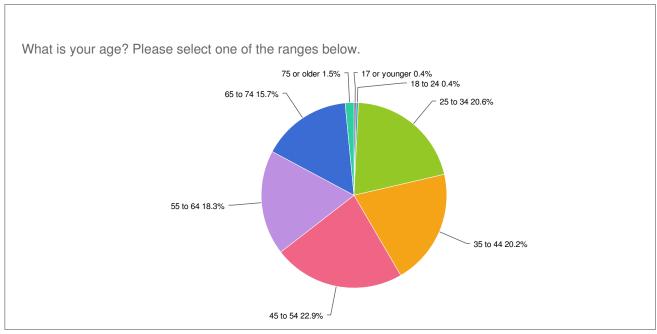
Total Respondents 217

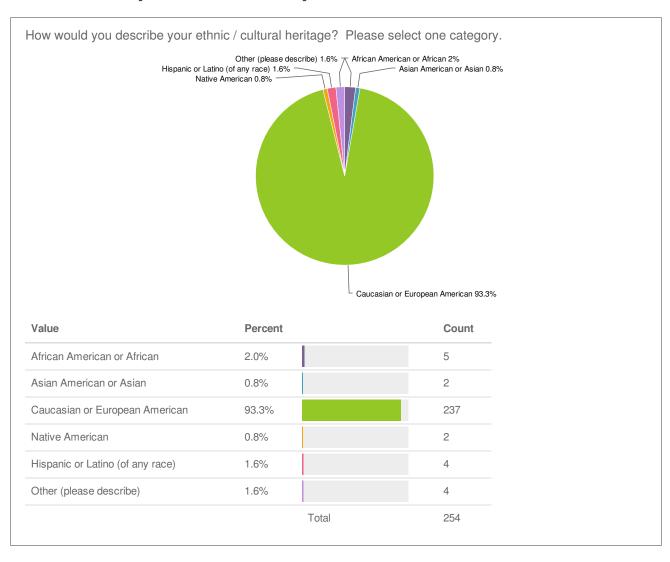
*Score is a weighted calculation. Items ranked first are valued higher than the following ranks, the score is the sum of all weighted rank counts.

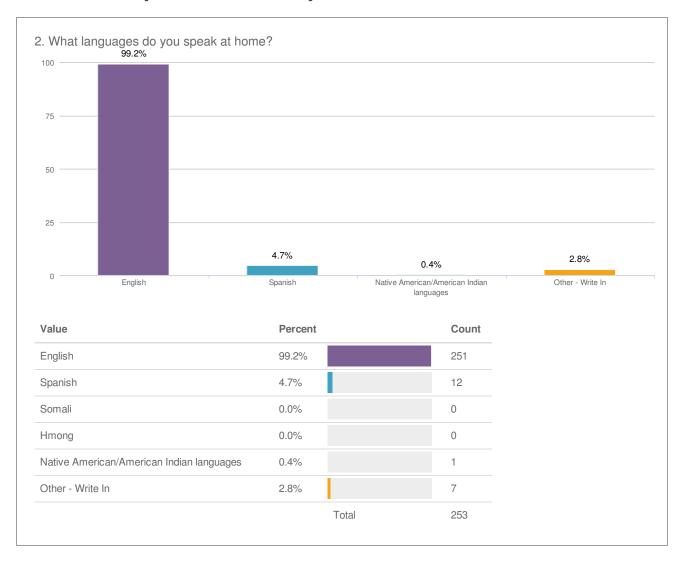


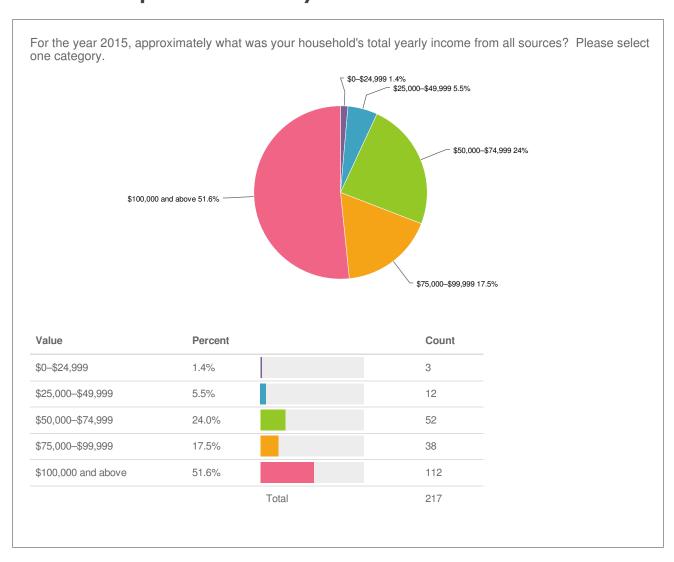












C.I - Public Opinon Web Survey and Results

We would like to know how well we are doing in reaching people who work or reside in Fitchburg. Please help us by providing your home zip code, and the names of the two cross streets nearest your place of residence.

| | Place of Residence | Responses | |
|---------------------------------------|----------------------|-----------|--|
| Home zip code | 227 100.0% | 227 | |
| Street 1 (example: Fitch Hatchery Rd) | 205 100.0% | 205 | |
| Street 2 (example: McKee Rd) | 177 100.0% | 177 | |

Please help us by providing your school or work zip code, and the names of the two cross streets nearest your place of work or school.

| | Workplace or school | Responses |
|--------------------------------------|----------------------|-----------|
| Zip code | 148 100.0% | 148 |
| Street 1 (example: Fish Hatchery Rd) | 131 100.0% | 131 |
| Street 2 (example: McKee Rd) | 106 100.0% | 106 |

BPAC Meetings

The Bicycle and Pedestrian Advisory Committee (BPAC) is an ad-hoc committee of 14 people appointed by Mayor Steve Arnold to advise and oversee the direction of the Fitchburg Bicycle and Pedestrian Plan - 2017 Update. This committee was tasked with guiding the direction of the project, offering guidance for the plan recommendations and facilitating communication and engagement with community stakeholders.

Over the course of the planning process, BPAC met nine times to review materials or participate in audits. All BPAC meetings were open to the public.

Below is a link to all of the video-recordings of BPAC meetings: http://factv.fitchburgwi.gov/Cablecast/public-site/index.html#/search?channel=3&query=bicycle%20and%20pedestrian

The following pages contain agendas and minutes for each BPAC meeting.



Administrative Offices 5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 Fax (608) 270-4275 www.fitchburgwi.gov

AGENDA

BICYCLE & PEDESTRIAN ADVISORY COMMITTEE
JANUARY 21, 2016
COMMUNITY CENTER - SYENE ROOM
7:00 PM

PLEASE TAKE NOTICE that the Bicycle & Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Thursday, January 21, 2016 at 7:00 PM** in the Fitchburg City Hall, 5520 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Public Appearances for Non Agenda Items
- Agenda Review
- 4. Agenda Items
 - a. Introductions
 - b. Committee Role, Tasks, and Reference Materials
 - c. Update to City of Fitchburg Bicycle and Pedestrian Plan
 - d. Development Projects/Proposals Lacy Road
- 5. Report from Department
- 6. Announcements
- 7. Adjournment

Note: It is possible that members of and possibly a quorum of members of other government bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, contact Fitchburg City Hall, 5520 Lacy Road, Fitchburg WI 33711,(608) 270-4200



5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 www.fitchburgwi.gov

APPROVED MINUTES Bicycle And Pedestrian Advisory Committee January 21, 2016 7:00 PM Community Center - Syene Room

Members Present: Michael Basarich, Roger Bass, Edwin Benet, Dawn Crim, Bill Hauda, Joe Imikowski, Angela Kinderman, Jake Johnson, Joe Maldonado, Andrew Potts, Julia Stanley, and Jarasa Woulf

Staff Present: Ahna Bizjak, Transportation Engineer and Wade Thompson, Resource/Project Planner

Others Present: Jimmy Anderson, Mayor Steve Arnold, Patrick Cheney, and Matt Jones

1. Call To Order

Chair Andy Potts called the meeting to order at 7:03 p.m.

2. Public Appearances for Non Agenda Items

None.

3. Agenda Review

Chair Potts called for review of the agenda. No changes were made to the agenda.

4. Agenda Items

a. Introductions

The various Committee members and City staff introduced themselves and provided relevant background and experience as it relates to the Committee. Wade Thompson, Resource/Project Planner in the City's Planning/Zoning Department, stated he would be the primary City staff contact for the Committee.

b. Committee Role, Tasks, and Reference Materials

Mayor Steve Arnold provided an overview of the Committee's role and tasks. Arnold stated his general goal in appointing the Committee was to advance bicycle/pedestrian options, and use of those options, in the City.

Arnold stated the Committee is subject to state open records and open meeting statutes and laws. Arnold clarified that all discussion amongst Committee members related to the Committee's tasks and duties, including discussion on specific projects, needs to be held during regularly scheduled Committee meetings, so as to avoid any issues related to a "walking quorum".

Arnold went on to state the Committee's major tasks and duties are as follows:

- 1. Update the City's Bicycle and Pedestrian Plan;
- Serve in an advisory capacity to various development and other projects/proposals related to biking/pedestrian issues in the City;

Arnold stated it was important the Committee give equal weight to pedestrian issues as they proceed with their tasks and duties. Arnold also stated the Committee was "ad hoc" in nature and would serve in that capacity for one year. Arnold further stated that after one year, the Common Council would determine if the Committee should remain or be disbanded.

Joe Maldonado asked if the City of Fitchburg coordinated with its northerly adjacent neighbor, the City of Madison, on relevant bicycle/pedestrian projects. Arnold stated the Cities do work together, when feasible, to achieve common bicycle/pedestrian goals.

Thompson provided a brief overview of resources available to the Committee, and stated those materials had been identified in the notice sent to the Committee prior to the meeting.

c. Update to City of Fitchburg Bicycle and Pedestrian Plan

Thompson provided a brief introduction and overview of one of the Committee's main tasks, overseeing an update of the City's Bicycle and Pedestrian Plan. Thompson stated the goal of the Plan is maintain and improve bicycle and pedestrian facilities in the City so as to:

- Provide safe and efficient options for bicycle and pedestrian transportation;
- 2. Encourage use of these options;

Thompson also stated the City would be utilizing a consultant to provide major components of the Plan update. Thompson stated the Plan update will be completed by mid to late 2016.

Maldonado asked for some examples of new content that could be included in the Plan update. Arnold and Ahna Bizjak gave examples, including buffered bike lanes and intersection improvements.

The Committee discussed various other potential elements of the Plan update, including analysis of ridership/use patterns, fostering bike "culture", park and bike facilities, general biking innovations, neighborhood trail connections, and green complete streets.

Jake Johnson asked for clarification of the consultant's role in the Plan update. Bizjak stated the consultant would present Plan update materials and drafts to the Committee, for their review and comment, based on input from the Committee and other interested parties, including other City Committees/officials and the general public.

d. Development Projects/Proposals - Lacy Road

Bizjak provided an overview of the Lacy Road project, which includes development of buffered bike lanes, a multi-use path, and sidewalk improvements on a segment of Lacy Road. Bizjak stated the project has been met with concern by various affected City landowers, and the City is working with said landowners to address these concerns while also working to meet the needs of the broader City community. Bizjak stated this is the type of project that would come before the Committee in the future, for their review and comment.

Edwin Benet asked what options are available to resolve conflict as it relates to this project. Arnold stated that it is the Common Council's role to ultimately decide which projects the City should pursue to best serve its residents.

The Committee discussed various other aspects related to affected landowners concerns on this project, and how to address those concerns. Dawn Crim asked for clarification on the role of the Committee as it relates to providing comment on specific development projects/proposals. Arnold and Bizjak stated the Committee's role needs to focus on serving in an advisory capacity, and providing relevant comment, on various development and other projects/proposals related to biking/pedestrian issues in the City.

Maldonado asked if commonly used bicycle/pedestrian terminology, along with accompanying images, could be provided to the Committee to assist in their education process. Potts stated he would work with staff to provide this information to the Committee.

5. Report from Department

None.

6. Announcements

Thompson stated that due to the timing of other City meetings, and in order to provide City staff adequate time to route Committee comments to appropriate parties, he was proposing that Committee meetings be held on the Monday before the third Tuesday of

every month. Various Committee members stated this proposed regularly scheduled Committee meeting date may not work for them. Thompson stated he would present some other meeting date options at the next Committee meeting.

Potts stated the next Committee meeting will be held at 7:00 p.m., Monday, February 15, 2016.

7. Adjournment

Motion by Joe Imikowski, second by Jake Johnson, to adjourn, carried unanimously.

Submitted by Wade Thompson, Resource/Project Planner.

Approved: April 11, 2016

4



Administrative Offices 5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 Fax (608) 270-4275 www.fitchburgwi.gov

AGENDA

Bicycle And Pedestrian Advisory Committee February 15, 2016 Community Center - Syene Room 7:00 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Monday**, **February 15**, **2016 at 7:00 PM** in the Fitchburg City Hall, 5520 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes
 - a. **Draft Minutes 1-21-2016**
- 3. Public Appearances for Non Agenda Items
- 4. Agenda Review
- 5. Agenda Items
 - a. Bike Infrastructure Design Presentation
 - b. Review and Approval of Bike/Ped Plan Update Consultant Request for Proposal (RFP)
 - c. <u>Development Proposal Architechtural Design Review 2920/2922 Fish</u> <u>Hatchery Road</u>



5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 www.fitchburgwi.gov

APPROVED MINUTES
Bicycle And Pedestrian Advisory Committee
February 15, 2016
7:00 PM
Community Center - Syene Room

Members Present: Darren Blankenship, Dawn Crim, Bill Hauda, Amanda Husk, Jake Johnson, Andy Potts, and Jarasa Woulf

Staff Present: Wade Thompson, Resource/Project Planner

Others Present: Chuck Chvala and Darryl Jordan

1. Call To Order

Chair Andy Potts called the meeting to order at 7:00 p.m. (A Committee quorum was not present, so no formal actions were taken at the meeting.)

2. Approval of Minutes

a. Minutes from the January, 21 meeting were not approved, as a Committee quorum was not present.

3. Public Appearances for Non Agenda Items

Darryl Jordan, 100 Sunny Meade Lane, Madison, WI 53713, representing Fitchburg Bicycle Advocates, stated he would like to a see consistent, minimum 10-foot path width along Lacy Road.

4. Agenda Review

Chair Potts called for review of the agenda. No changes were made to the agenda.

5. Agenda Items

a. Bike Infrastructure Design Presentation

Chair Potts provided a presentation on various aspects of bike infrastructure design, including bike lanes, cycle tracks, and intersection design treatments. The Committee discussed various aspects of bike infrastructure identified in the presentation.

 Review and Approval of Bike/Ped Plan Update Consultant Request for Proposal (RFP)

Wade Thompson provided a brief overview of the draft Consultant Request for Proposal (RFP), seeking assistance in development of the 5-year update to the City's Bicycle and Pedestrian Plan. Thompson stated the City has \$15,000 available to hire a consultant to assist in development of said update. Thompson stated the RFP would be posted in late February/early March, with RFP submittals due by the end of March.

The Committee requested minor edits to the RFP, including having the RFP submittals provided in electronic format, as well as having the submittals include copies of, or links to, previous work products similar in nature to the update to the City's Bicycle and Pedestrian Plan. Darryl Jordan also requested a copy of the final RFP be sent to the Fitchburg Bicycle Advocates.

Thompson stated he would incorporate Committee edits into the final RFP, as well as send the final RFP to Fitchburg Bicycle Advocates.

The Committee directed Thompson to proceed with posting the RFP in late February/early March.

 Development Proposal - Architechtural Design Review - 2920/2922 Fish Hatchery Road

Thompson provided a brief overview of the development proposal, stating a hotel, conference center, and restaurant were being proposed along Fish Hatchery Road, in the northern part of the City, north of Post Road. Thompson stated the Committee should review the proposal with the intent of providing specific comments, as it relates to bicycle/pedestrian issues on said proposal to the City's Plan Commission. Thompson stated the developers have worked with City staff to address various staff concerns and issues.

Chuck Chvala, 10 East Doty St., Suite 507, Madison, representing Crown Point Development, provided further detail on the development proposal. Chvala pointed out the various "bicycle" features of the proposal, including bike parking, hotel rooms with bike storage, and the possibility of a future bike sharing/renting station.

The Committee discussed various aspects of the development proposal, including hotel building height, the availability of sidewalks on both sides of Pike Dr., the Pike Dr. extension and the current hazards in crossing Fish Hatchery Road on bike or by foot, the opportunity for Bus Rapid Transit along the Fish Hatchery corridor in the future, and accessibility to bike trails from the proposed hotel site.

The Committee did not have any specific comments to pass along to the Plan Commission on the development proposal, but did note its general support for the proposal and its bicycle/pedestrian features.

6. Report from Department

a. Resolution R-17-16 A Resolution Authorizing City Involvement in the Capital Area Regional Planning Commission Active Living Places Initiative, Per a Memorandum of Understanding

Thompson provided an update on the Active Living Places Initiative, stating the project, under the direction of the Capital Area Regional Planning Commission, was designed to explore methods to encourage more walkable/bikeable neighborhoods throughout Dane County. Thompson stated the neighborhoods along Fish Hatchery Road, in the northern portion of the City of Fitchburg, are part of the Initiative. Thompson also stated the results of the Initiative could potentially be incorporated in to the update of the City's Bicycle and Pedestrian Plan.

b. Development of Dane County Bicycle Wayfinding Manual

Thompson stated Dane County was in the process of developing a County Bicycle Wayfinding Manual to coordinate bicycle trail signage, etc. in various municipalities, and other local governmental units, throughout the County.

The Committee requested Thompson contact the County to see if someone associated with the project would be able to attend a future Committee meeting, to provide an overview of the project. Thompson stated he would contact the County to see if this was feasible.

7. Announcements

Thompson stated that due to the timing of other City meetings, and in order to provide City staff adequate time to route Committee comments to appropriate parties, he was proposing that Committee meetings be held on the Monday, the week before the third Tuesday of every month. The Committee agreed to this proposed meeting schedule.

Chair Potts stated the next Committee meeting will be held at 7:00 p.m., Monday, March 7, 2016.

| 0 | Adiasson |
|----|---|
| 8. | Adjournment |
| | No motion to adjourn as a Committee quorum was not present. |
| | Submitted by Wade Thompson, Resource/Project Planner. |
| | Approved: April 11, 2016 |
| | Approved. April 11, 2010 |
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Administrative Offices 5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 Fax (608) 270-4275 www.fitchburgwi.gov

AGENDA

Bicycle And Pedestrian Advisory Committee April 11, 2016 Community Center - Swan Creek Room 7:00 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Monday, April 11, 2016 at 7:00 PM** in the Community Center, 5520 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes
 - a. **Draft Minutes 1-21-2016**
 - b. <u>Draft Minutes 2-15-2016</u>
- 3. Public Appearances for Non Agenda Items
- 4. Agenda Review
- 5. Agenda Items
 - a. <u>Dane County Bicycle Wayfinding Manual Renee Callaway, Madison Area</u>
 Transportation Planning Board
 - b. <u>Update on Bicycle and Pedestrian Plan Consultant Selection</u>
 - c. <u>Update on Proposed City Ordinance Changes Snow and Ice Removal</u> and Sidewalks



5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 www.fitchburgwi.gov

APPROVED MINUTES Bicycle And Pedestrian Advisory Committee April 11, 2016 7:00 PM Community Center - Swan Creek Room

Members Present: Jimmy Anderson, Roger Bass, Darren Blankenship, Bill Hauda, Amanda Husk, Joe Imikowski, Jake Johnson, Andy Potts, and Julia Stanley

Staff Present: Wade Thompson, Resource/Project Planner

1 Call To Order

Chair Andy Potts called the meeting to order at 7:03 p.m.

2 Approval of Minutes

a Draft Minutes - 1-21-2016

Motion by Julia Stanley, second by Roger Bass, to approve the minutes of January 21, 2016, carried unanimously.

b Draft Minutes - 2-15-2016

Motion by Bass, second by Darren Blankenship, to approve the minutes of February 15, 2016, carried unanimously.

3 Public Appearances for Non Agenda Items

Chair Potts stated that if the public asks for specific information or have comments outside of the normal Committee meeting dates, he or Wade Thompson would address the requests/comments and provide the Committee with an overview of said requests/comments.

4 Agenda Review

Chair Potts called for a review of the agenda. No changes were made to the agenda.

5 Agenda Items

 Dane County Bicycle Wayfinding Manual - Renee Callaway, Madison Area Transportation Planning Board

Renee Callaway, Madison Area Transportation Planning Board, gave a presentation on the development of the Dane County Bicycle Wayfinding Manual. Callaway explained that the goal of the manual is to encourage and develop consistent bicycle trail signage throughout the County, so as to better orientate and inform trail users. Callaway stated that a committee has been formed to oversee development of the manual, and includes Ahna Bizjak, Transportation Engineer, City of Fitchburg. Callaway stated that once the manual is complete, it can be utilized by various municipalities throughout the County.

The Committee discussed various aspects of the project and manual, including distance/time indicators, potential advertising along trails, and sign material and composition.

b Update on Bicycle and Pedestrian Plan - Consultant Selection

Wade Thompson provided a brief update on the consultant selection process for the update to the Bicycle and Pedestrian Plan. Thompson stated a Plan update Request for Proposal (RFP) was published, with five RFP bids submitted to the City. Thompson stated staff selected two finalists, Community Design Group, out of Minneapolis, MN and Wisconsin Bike Fed/MSA, out of Madison. Thompson also stated staff just completed interviews with the two finalists and would be selecting the preferred consultant later in the week of April 11.

 Update on Proposed City Ordinance Changes - Snow and Ice Removal and Sidewalks

Thompson provided a brief update on some proposed City ordinance changes as it relates to snow and ice removal on sidewalks. Thompson stated the City's Board of Public Works and Council are still discussing the changes and when they were formalized and approved, he would notify the Committee of the changes.

Jake Johnson provided further detail on the proposed changes, including a proposal for the City to clear certain sidewalks that abut residential properties to the rear, including those on McKee Road.

d Update on City Bike Month Activities and Initiatives

Erika Kluetmeier, the City's Sustainability Specialist, provided an update on bike-related initiatives that she is working on, including the Bike Commuter Challenge, and various organized bike ride throughout the City.

e Discuss and Schedule Walking "Audit"

The Committee agreed they would like to undertake an "audit", examining and discussing various specific bicycle and pedestrian facilities/infrastructure throughout the City. Potential audit locations discussed by the Committee included population centers (N. Fish Hatchery Road), high "accident" areas, areas in which new infrastructure/facilities have been installed, and areas in which new infrastructure/facilities are needed but have not yet been installed. The Committee directed Thompson to begin planning for the audit.

6 Report from Department

Thompson stated he and other relevant staff would be providing an overview of the Bicycle and Pedestrian Plan update process to the City's Committee of the Whole on April 27.

7 Announcements

The next Committee meeting date was set for 7:00 p.m., Monday, May 9, 2016.

8 Adjournment

Motion by Johnson, second by Amanda Husk, to adjourn at 7:59 p.m., carried unanimously.

Submitted by Wade Thompson, Resource/Project Planner.

Approved: September 26, 2016



Administrative Offices 5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 Fax (608) 270-4275 www.fitchburgwi.gov

AGENDA

Bicycle And Pedestrian Advisory Committee May 09, 2016 Community Center - Syene Room 7:00 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Monday, May 09, 2016 at 7:00 PM** in the Fitchburg Community Center, 5510 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes
 - a. 4-11-2016
- 3. Public Appearances for Non Agenda Items
- 4. Agenda Review
- 5. Agenda Items
 - a. <u>Bike/Ped Plan Update Presentation and Discussion Community Design</u>
 Group
 - b. Confirm Walking and Biking Audit Locations and Times
- 6. Report from Department
- 7. Announcements
- 8. Adjournment

Note: It is possible that members of and possibly a quorum of members of other government bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, contact Fitchburg City Hall, 5520 Lacy Road, Fitchburg WI 53711,(608) 270-4200



5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 www.fitchburgwi.gov

APPROVED MINUTES Bicycle And Pedestrian Advisory Committee May 09, 2016 7:00 PM Community Center - Syene Room

Members Present: Roger Bass, Darren Blankenship, Amanda Husk, Joe Imilkowski, Andy Potts, and Julia Stanley

Staff Present: Wade Thompson, Resource/Project Planner

1 Call To Order

Chair Andy Potts called the meeting to order at 7:03 p.m. (A Committee quorum was not present, so no formal actions were taken at the meeting.)

2 Approval of Minutes

a 4-11-2016

Minutes were not approved as a Committee quorum was not present.

3 Public Appearances for Non Agenda Items

None.

4 Agenda Review

Chair Potts called for review of the agenda. No changes were made to the agenda.

5 Agenda Items

a Bike/Ped Plan update presentation and discussion - Community Design Group

Wade Thompson stated the City has selected Community Design Group (CDG), out of Minneapolis, Minnesota, to coordinate the update to the City's Bicycle and Pedestrian Plan. Thompson introduced Antonio Rosell and Jody Rader, from CDG, who then presented, via video conference, an overview of the Plan update process to the Committee.

Rosell presented various aspects of the Plan update process, including Plan update approach, goals and tools, timeline, Committee involvement, and initial Plan update activities. Rosell stated the Plan update would utilize an "Active Living" approach to attempt to increase opportunities for biking and walking as a part of normal, everyday activity. Rosell went on to state the Plan update process would identify various Fitchburg assets related to biking and walking, and ways to maintain and enhance these assets. Rosell also identified various goals for the Plan update, including improving conditions for walking/biking for all ages, as well as advancing economic development opportunities in the City.

Rosell went on to identify various infrastructure tools to be explored in the Plan update, including cycle tracks and various intersection treatments. Rosell also discussed programming recommendations to be included in the Plan update, including education and encouragement, enforcement and system safety, polices, wayfinding, bike parking, and facility maintenance. Rosell stated that a public meeting, to gather feedback on the Plan update, would likely take place in July of 2016.

Rosell identified the Committee as a key player in outreach activities related to the Plan update. Rosell identified and provided an overview of various tools to be utilized in outreach activities, including a webpage, public opinion survey, and a "wikimap".

Rader then led the Committee in a discussion centered on some questions prepared by CDG, as follows:

1. What makes you happy/hopeful/excited about the Plan?

Committee discussion centered on implementing recommendations from the 2008 Plan, the positive appeal of the engagement tools prepared by CDG, and the impacts of the Verona Road project on biking/walking in the City.

2. From your perspective: What does success look like?

Committee discussion centered on integration of Fitchburg's pedestrian/biking facilities with those throughout the region, addressing concerns of the various pedestrian/biking stakeholders throughout the City and region (those with physical disabilities, mountain bikers, etc.), taking advantage of Fitchburg's geography and infrastructure so as to develop Fitchburg as a biking destination,

providing productive educational opportunities, and getting buy-in from City residents and neighborhood associations.

3. What risks/hazards do you perceive? What challenges do you anticipate?

Committee discussion centered on costs required to implement Plan recommendations, as well as the positive economic impacts that implementation of these recommendations could bring to the City and region.

4. What parts/aspects of the plan do you think we should spend more time on?

Committee discussion centered on drawing on bike-related local industries (Saris, Trek, etc.) to assist in Plan update community engagement and support. The Committee also discussed addressing dangerous intersections.

5. What do you think are the greatest/key opportunities?

Committee discussion centered on drawing on bike-related local industries (Saris, Trek, etc.) to assist in Plan update community engagement and support, creating linkages to public transit and other modes of transportation, potential new bus routes in the City, engaging individuals and organizations that have not traditionally been engaged in pedestrian/bicycle issues, developing Fitchburg as a biking destination, and creating a Plan that is accessible and easy to understand by various parties.

Rosell and Rader thanked the Committee for their input and feedback and stated they would continue to work with Thompson to begin the Plan update process.

b Confirm Walking and Biking Audit Locations and Times

Thompson presented a map identifying various potential walking and biking audit locations. Thompson stated the Committee could do one walking audit, and one biking audit, on separate dates, with the audits taking approximately 1.5 hours each.

The Committee decided they would like to do a walking audit in the north Fish Hatchery Road area and a biking audit centered on the Badger State Trail-Capital City Trail-Seminole Highway.

The Committee decided they would undertake the biking audit at 5.30 p.m., Monday, June 13. The audit would begin at the Dawley Bike Hub parking lot, with a regular Committee meeting to follow, if needed.

The Committee decided they would undertake the walking audit at 5.30 p.m., Monday, July 12. The audit would begin at the Nine Springs Golf Course parking lot, with a regular Committee meeting to follow, if needed.

6 Report from Department

Thompson announced that the City is hosting the Fitchburg Agriculture Route (FAR) Bike Tour at 10:00 a.m., Saturday, May 21 and invited any interested Committee members to attend.

7 Announcements

None.

8 Adjournment

No motion to adjourn as a Committee quorum was not present.

Submitted by Wade Thompson, Resource/Project Planner.

Approved: September 26, 2016

4



Administrative Offices 5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 Fax (608) 270-4275 www.fitchburgwi.gov

AGENDA

Bicycle And Pedestrian Advisory Committee
June 13, 2016

Dawley Conservancy Parking Lot – 3041 Seminole Highway
5:30 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Monday**, **June 13**, **2016 at 5:30 PM** in the Dawley Conservancy Parking Lot, 3041 Seminole Highway, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes
 - a. 4-11-2016
 - b. <u>5-9-2016</u>
- 3. Public Appearances for Non Agenda Items
- 4. Agenda Review
- Agenda Items
 - a. <u>Bicycle Audit Dawley Bike Hub, Badger State Trail, Seminole Highway,</u> and Capital City Trail
 - b. Identify Outreach Activities for Bicycle and Pedestrian Plan Update
- 6. Report from Department
- 7. Announcements
- 8. Adjournment

Note: It is possible that members of and possibly a quorum of members of other government bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, contact Fitchburg City Hall, 5520 Lacy Road, Fitchburg WI 53711,(608) 270-4200



5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 www.fitchburgwi.gov

APPROVED MINUTES Bicycle And Pedestrian Advisory Committee June 13, 2016 Dawley Conservancy Parking Lot – 3041 Seminole Highway 5:30 PM

Members Present: Michael Buri, Dawn Crim, Bill Hauda, Joe Imilkowski, and Julia Stanley

Staff Present: Ahna Bizjak, Transportation Engineer, Sam Wessel, Planning Intern, and Wade Thompson, Resource/Project Planner

1 Call To Order

As Chair Potts was unable to attend the meeting, he designated Julia Stanley as Chair for the meeting. Chair Stanley called the meeting to order at 5:33 p.m. (A Committee quorum was not present, so no formal actions were taken at the meeting.)

2 Approval of Minutes

- a 4-11-2016
- b 5-9-2016

Minutes were not approved as a Committee quorum was not present.

3 Public Appearances for Non Agenda Items

None.

4 Agenda Review

Chair Stanley called for agenda review. Agenda Item 5a. and 5b. were switched in order, with 5b. coming before 5a..

5 Agenda Items

 Bicycle Audit - Dawley Bike Hub, Badger State Trail, Seminole Highway, and Capital City Trail

1

Ahna Bizjak led the bike audit and explained the general goals of the audit, including identification of issues, and also successes, related to bicycle infrastructure and facilities on the audit route. Bizjak explained the route would consist of off-road bike trails/paths, and City streets both with and without bike lanes. Bizjak also provided an audit checklist to Committee, in which the Committee members could provide feedback on the audit. Bizjak asked that the Committee members complete the checklist and provide to Wade Thompson.

The Committee then completed the audit route, which included the Badger State Trail, Seminole Highway, McKee Road, Longford Terrace, Cannonball Path, and the Capital City Trail. The audit stopped at various points throughout the route and discussed various biking issues, including potential opportunities to improve biking on McKee Road, the safety of major road/trail crossings, and the benefits of continuing to build a comprehensive and integrated off-road trail/path system throughout the City.

b Identify Outreach Activities for Bicycle and Pedestrian Plan Update

Thompson provided a brief overview of recent Bicycle and Pedestrian Plan Update activities. Thompson stated there has been a good amount of feedback provided on the Plan update engagement tools, including the public opinion survey and the wikimap. Thompson also stated the survey and wikimap would be available until July 31. Thompson encouraged Committee members to continue to publicize the Plan update engagement tools. Thompson also stated that in discussions with Community Design Group, a tentative date of July 21 had been discussed for the first Plan update open house/workshop

Stanley also provided an update on engagement activities, including various neighborhood events she has helped coordinate in the north Fish Hatchery Road area.

6 Report from Department

None.

7 Announcements

None.

8 Adjournment

No motion to adjourn as a Committee quorum was not present.

Submitted by Wade Thompson, Resource/Project Planner.

Approved: September 26, 2016

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AGENDA

Bicycle And Pedestrian Advisory Committee
July 11, 2016
Nine Springs Golf Course (2301 Traceway Drive) and Community Center - Camp
Badger Room (5510 Lacy Road)
5:30 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Monday**, **July 11**, **2016 at 5:30 PM**, beginning at the Nine Spring Golf Course, 2301 Traceway Drive and ending at the Fitchburg Community Center, 5510 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes
 - a. **4-11-2016**
 - b. **5-9-2016**
 - c. <u>6-13-2016</u>
- 3. Public Appearances for Non Agenda Items
- Agenda Review
- 5. Agenda Items
 - a. Walking Audit North Fish Hatchery Road Area (Meet at Nine Springs Golf Course Parking Lot 2301 Traceway Drive)
 - b. <u>Bicycle and Pedestrian Plan Update Status Community Design Group</u> (Reconvene Camp Badger Room - Community Center - 5510 Lacy Road)
 - c. <u>Bicycle and Pedestrian Plan Update Open House and Workshop: July</u>
 21, McKee Farms Park



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APPROVED MINUTES Bicycle And Pedestrian Advisory Committee July 11, 2016 5:30 PM

Nine Springs Golf Course (2301 Traceway Drive) and Community Center - Camp Badger Room (5510 Lacy Road)

Members Present: Roger Bass, Darren Blankenship, Michael Buri, Bill Hauda, Joe Imilkowski, and Andy Potts

Staff Present: Ahna Bizjak, Transportation Engineer and Wade Thompson, Resource/Project Planner

1 Call To Order

Chair Andy Potts called the meeting to order at 5:30 p.m. (A Committee quorum was not present, so no formal actions were taken at the meeting.)

2 Approval of Minutes

- a 4-11-2016
- b 5-9-2016
- c 6-13-2016

Minutes were not approved as a Committee quorum was not present.

3 Public Appearances for Non Agenda Items

None.

4 Agenda Review

Chair Potts called for review of the agenda. No changes were made to the agenda.

5 Agenda Items

 Walking Audit - North Fish Hatchery Road Area (Meet at Nine Springs Golf Course Parking Lot - 2301 Traceway Drive)

Ahna Bizjak led the walking audit and explained the general goals of the audit, including identification of issues, and also successes, related to pedestrian infrastructure and facilities on the audit route. Bizjak explained the route would entail walking on sidewalks through multi and single-family residences, and commercial areas along Fish Hatchery Road. Bizjak also provided an audit checklist to the Committee, in which the Committee members could provide feedback on the audit. Bizjak asked that the Committee members complete the checklist and provide to Wade Thompson.

The Committee then completed the audit route, which included Traceway Drive, Post Road, Coho Street, Eggiman Road, and Fish Hatchery Road. The audit stopped at multiple points throughout the route and discussed various pedestrian issues, including sidewalk repair and maintenance, controlled and uncontrolled intersections, and pedestrian safety and improvement measures.

b Bicycle and Pedestrian Plan Update Status - Community Design Group (Reconvene Camp Badger Room - Community Center - 5510 Lacy Road)

Jody Rader, Community Design Group, provided an overview on the status of the Bicycle and Pedestrian Plan Update. Rader discussed various Plan update engagement activities, including a public opinion survey and "wikimap", an online mapping tool that allows respondents to enter in comments regarding various biking/walking issues and/or concerns on a City map. Rader indicated that the number of survey and wikimap respondent numbers were close to what was anticipated at the beginning of the engagement process. Rader stated the survey and wikimap would be available to the public until July 31.

Rader went on to provide an overview of existing conditions in the City for biking/walking, consisting of a map set that displayed various aspects of biking/walking in the City, including existing and potential facilities and crash data.

Rader concluded her presentation with an overview of biking/walking guidelines identified in the 2008 Bicycle and Pedestrian Plan.

 Bicycle and Pedestrian Plan Update - Open House and Workshop: July 21, McKee Farms Park

Rader and the Committee finalized logistics for the July 21st open house and workshop at McKee Farms Park. Rader stated the purpose and intent of the open house/workshop was to provide an overview of existing biking/walking

| conditions in the City, in addition to gathering feedback from residents regarding |
|--|
| ways in which opportunities for biking/walking in the City could be enhanced. |

6 Report from Department

None.

7 Announcements

None.

8 Adjournment

No motion to adjourn as a Committee quorum was not present.

Submitted by Wade Thompson, Resource/Project Planner.

Approved: September 26, 2016



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AGENDA

Bicycle And Pedestrian Advisory Committee September 26, 2016 Community Center - Syene Room 7:00 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Monday, September 26, 2016 at 7:00 PM** in the Fitchburg Community Center, 5510 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes
 - a. 4-11-2016
 - b. <u>5-9-2016</u>
 - c. <u>6-13-2016</u>
 - d. <u>7-11-2016</u>
- 3. Public Appearances for Non Agenda Items
- 4. Agenda Review
- Agenda Items
 - a. <u>Bicycle and Pedestrian Plan 2016 Update DRAFT 9-20-2016</u>
 - b. Bicycle and Pedestrian Plan 2016 Update Engagement and Adoption

| 6. | Report from Department | | |
|-------------------------|--|--|--|
| 7. | Announcements | | |
| 7. | Announcements | | |
| 8. | Adjournment | | |
| to gather this notic | Note: It is possible that members of and possibly a quorum of members of other government bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, contact Fitchburg City Hall, 5520 Lacy Road, Fitchburg WI 53711,(608) 270-4200 | | |
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APPROVED MINUTES Bicycle And Pedestrian Advisory Committee September 26, 2016 7:00 PM Community Center - Syene Room

Members Present: Roger Bass, Darren Blankenship, Michael Buri, Bill Hauda, Joe Imilkowski, Jake Johnson, and Andy Potts

Staff Present: Wade Thompson, Resource/Project Planner

1 Call To Order

Chair Andy Potts called the meeting to order at 7:05 p.m.

2 Approval of Minutes

- a 4-11-2016
- b 5-9-2016
- c 6-13-2016
- d 7-11-2016

Motion by Roger Bass, second by Darren Blankenship, to approve the minutes of April 11, 2016, May 9, 2016, June 13, 2016, and July 11, 2016, carried unanimously.

3 Public Appearances for Non Agenda Items

None.

4 Agenda Review

Chair Potts called for a review of the agenda. No changes were made to the agenda.

5 Agenda Items

a Bicycle and Pedestrian Plan - 2016 Update - DRAFT 9-20-2016

Jody Rader, Community Design Group, provided an overview and update on the 2016 update to the City's Bicycle and Pedestrian Plan.

Rader began by giving a recap of the Plan update open house/workshop held on September 26. Rader stated that much of the discussion at the open house/workshop centered on City resident's opposition to placing sidewalks in existing neighborhoods. Rader stated that the Plan update draft has no specific recommendations regarding installing sidewalks in existing neighborhoods. Rader stated the 2008 Plan does have specific recommendations for sidewalks in existing neighborhoods and that this was potentially the source of confusion regarding the content in the Plan update draft.

Rader stated that the Plan update draft content was being revised subject to feedback received from the open house/workshop. Wade Thompson reiterated this point.

Rader went on to highlight various aspects of the Plan update draft, including the rationale for the update, the Plan update engagement process, and major plan content, including recommendations to enhance the City's bicycle and pedestrian network.

Chair Potts then called for public comment. Public comment consisted of the following:

Glenn Unger, 2623 Richardson Street, Fitchburg, stated verbally he was in opposition to the current draft of the Bicycle and Pedestrian Plan. Unger stated he is in opposition to installation of sidewalks in existing residential neighborhoods as it relates to cost and topography. Unger also questioned the data used to formulate Priority Pedestrian Network Gaps and Neighborhood Walk Routes, as identified in the draft Plan update. Unger also stated he thought the public opinion survey was biased towards walking/biking and requested that another public meeting be held in which the public would have the opportunity to review the draft before the meeting.

Randy Hess, 2640 Osmundsen Road, Fitchburg, stated verbally he was in opposition to the current draft of the Bicycle and Pedestrian Plan. Hess stated he is in opposition to installation of sidewalks in existing residential neighborhoods and stated he was not able to locate an online copy of City of Fitchburg resolution R-75-10.

Larry Werner, 5689 Modernaire Street, Fitchburg, stated verbally he was in opposition to the current draft of the Bicycle and Pedestrian Plan. Werner stated he is in opposition to installation of sidewalks in existing residential neighborhoods and questioned the health benefits of sidewalks, as well as the City's role in educating its residents on the benefits of walking.

Beverly Punzel, 5691 Tudor Drive, Fitchburg, stated in writing she was in opposition to the current draft of the Bicycle and Pedestrian Plan.

Ronald Buchholz, 2587 Monument Court, Fitchburg, stated verbally he was in opposition to the current draft of the Bicycle and Pedestrian Plan. Buchholz asked for clarification on distribution of drafts of the Plan update. Thompson stated a draft would be posted online on September 30 and would replace the version being discussed at this meeting (Version 9/20/2016).

Chair Potts opened up the discussion amongst the Committee. Jake Johnson requested that any policy recommendations for pedestrian corridors, as identified in the draft Plan, be very precise and specific to avoid any confusion as to the implications of said recommendations. Rader stated she was working with City staff on this issue. Johnson also questioned if the Plan could be termed a "Study". Thompson stated Plan was probably a more accurate term, given content, but that naming terminology could be revisited if the Committee so desired. Bass asked if more specific, targeted outreach could be done to various stakeholders, including seniors. Thompson stated Community Design Group, and Julia Stanley, Committee member, have done an exceptional job in community engagement and outreach, and that additional engagement and outreach would be undertaken over the next few months. Johnson also asked if specific portions of the Plan update draft could be sent to applicable neighborhoods, for their review. Thompson stated he would look into this.

b Bicycle and Pedestrian Plan 2016 Update - Engagement and Adoption

Thompson announced that he was still working with other City staff and Community Design Group on finalizing the timeline moving forward for the update to the City's Bicycle and Pedestrian Plan. Thompson stated that the revised timeline would be posted on the Plan update webpage (http://www.fitchburgbikepedplan.org/), along with a draft of the Plan update, on September 30.

6 Report from Department

None.

7 Announcements

Chair Potts asked Thompson if he could coordinate with Ahna Bizjak, City Transportation Engineer, to present on various site specific bicycle/pedestrian issues, including "trouble spots" in the City. Thompson stated he would coordinate with Bizjak to present on some of these issues at future Committee meetings.

Thompson reiterated that he was still working with other City staff and Community Design Group on finalizing the engagement and outreach timeline moving forward for the update to the City's Bicycle and Pedestrian Plan. As such, Thompson requested that once the timeline was finalized, he would forward, for the Committee's consideration, some dates for the next Committee meeting. The Committee agreed to proceed in this manner.

| 8 | Adjournment |
|---|--|
| | Motion by Bass, second by Johnson, to adjourn at 8:18 p.m., carried unanimously. |
| | Submitted by Wade Thompson, Resource/Project Planner. |
| | Approved: December 19, 2016 |
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AGENDA

Bicycle And Pedestrian Advisory Committee December 19, 2016 Community Center - Syene Room 7:00 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Monday, December 19, 2016 at 7:00 PM** in the Syene Room, Community Center, 5510 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes
 - a. <u>9-26-2016</u>
- 3. Public Appearances for Non Agenda Items
- 4. Agenda Review
- 5. Agenda Items
 - b. Community Design Group Draft 12-8-2016 2016 Update to City of Fitchburg Bicycle and Pedestrian Plan
- 6. Report from Department
- 7. Announcements
- 8. Adjournment

Note: It is possible that members of and possibly a quorum of members of other government bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, contact Fitchburg City Hall, 5520 Lacy Road, Fitchburg WI 53711,(608) 270-4200



5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 www.fitchburgwi.gov

APPROVED MINUTES Bicycle And Pedestrian Advisory Committee December 19, 2016 7:00 PM Community Center - Syene Room

Members Present: Roger Bass, Darren Blankenship, Dawn Crim, Jennifer Everson, Michael Buri, Andy Potts, and Juila Stanley

Staff Present: Wade Thompson, Resource/Project Planner

1 Call To Order

Chair Andy Potts called the meeting to order at 7:06 p.m.

2 Approval of Minutes

a. 9-26-2016

Motion by Julia Stanley, second by Roger Bass, to approve the minutes of September 26, 2016, carried unanimously.

3 Public Appearances for Non Agenda Items

None.

4 Agenda Review

Chair Potts called for a review of the agenda. No changes were made to the agenda.

5 Agenda Items

 Community Design Group - Draft 12-8-2016 - 2016 Update to City of Fitchburg Bicycle and Pedestrian Plan

Jody Rader, Community Design Group, presented an overview of Draft 12-8-

2016 of the 2016 Update to the City of Fitchburg Bicycle and Pedestrian Plan. Rader presented major content of the Plan update draft, including approach, community engagement, Bicycle and Pedestrian Route Network recommendations, and implementation.

The Committee discussed various aspects of the Plan draft. Chair Potts requested that all major bike-related events in Fitchburg be identified in the Plan, as well as recent regional wayfinding projects as coordinated by Dane County. Potts stated the Plan should also consider a recommendation related to allowing developers to provide additional bike parking, in lieu of traditional surface lot automobile parking. Potts also mentioned that continuation of the Bicycle and Pedestrian Advisory Committee, after the Plan is adopted, could be included as a recommendation in the Plan.

Wade Thompson provided further detail on pedestrian recommendations in the Plan draft, stating that the recommendations reflect general sentiment among those that participated in the Plan development engagement process. Thompson passed out a copy of City Resolution R-75-10, Plan draft pedestrian recommendations to address said Resolution, as well as a new, proposed Resolution R-185-16. Thompson stated pedestrian recommendations in the Plan draft specifically state new sidewalks will not be installed in existing residential sub-divisions/areas, as identified on a map in the Plan draft.

Thompson stated it was his understanding that R-185-16 was being proposed to provide additional City policy as it relates to restricting new sidewalks in existing residential sub-divisions/areas. Thompson also stated R-185-16 was not referred out by the City Council to the Bicycle and Pedestrian Advisory Committee for review and comment.

Jay Hochmuth, 2888 Osmundsen Road, Fitchburg, stated verbally he was representing 20 of his neighbors, and they were in support of current pedestrian recommendations in the Plan draft related to restricting new sidewalks in existing residential sub-divisions/areas, but would like to see additional City policy to address this issue, in the form of a resolution or ordinance. Hochmuch also stated the Plan and any resolution or ordinance should be consistent.

The Committee went on to discuss various aspects of the current Plan draft recommendation related to restricting new sidewalks in existing residential subdivisions/areas, including the impact on public health, safety concerns, and the implications for the City as a whole. Dawn Crim asked if the City had data related to pedestrian and biking safety in the City. Thompson referenced Figure 2.7 of the draft Plan which identifies motor vehicle crashes with pedestrians and bicyclists.

6 Report from Department

Thompson provided a summary of the Plan draft review public meeting held on December 15, 2016. Thompson stated the meeting was attended by approximately 20 people. Thompson relayed the general sentiment of meeting attendees was satisfaction with the Plan draft, but concern that additional City policy was needed as it relates to restricting new sidewalk installation in existing residential sub-

divisions/areas.

7 Announcements

The next Committee meeting was scheduled for January 17, 2017. The Committee agreed that at this meeting the Committee would take action to recommend a Plan draft to the City Council for adoption.

8 Adjournment

Motion by Roger Bass, second by Crim, to adjourn at 8:45 p.m., carried unanimously.

Submitted by Wade Thompson, Resource/Project Planner.

Approved: January 17, 2017



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AGENDA

Bicycle and Pedestrian Advisory Committee January 17, 2017 Community Center - Syene Room 7:00 PM

PLEASE TAKE NOTICE that the Bicycle and Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Tuesday**, **January 17**, **2017 at 7:00 PM** in the Fitchburg Community Center, 5510 Lacy Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. Call To Order
- 2. Approval of Minutes

12-19-2016

- 3. Public Appearances for Non Agenda Items
- 4. Agenda Review
- 5. Agenda Items
 - a. Recommend approval of 2017 City of Fitchburg Bicycle and Pedestrian Plan to Fitchburg Common Council
 - b. Adoption process for 2017 City of Fitchburg Bicycle and Pedestrian Plan
- 6. Report from Department
- 7. Announcements
- 8. Adjournment

Note: It is possible that members of and possibly a quorum of members of other government bodies of the municipality may be in attendance at the above stated meeting to gather information. No action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice. Please note that, upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, contact Fitchburg City Hall, 5520 Lacy Road, Fitchburg WI 53711,(608) 270-4200



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DRAFT MINUTES Bicycle And Pedestrian Advisory Committee January 17, 2017 7:00 PM Community Center - Syene Room

Members Present: Roger Bass, Darren Blankenship, Michael Buri, Dawn Crim, Jennifer Everson, Joe Imilkowski, Andy Potts, and Juila Stanley

Staff Present: Wade Thompson, Resource/Project Planner

1 Call To Order

Chair Andy Potts called the meeting to order at 7:04 p.m.

2 Approval of Minutes

12-19-2016

Motion by Roger Bass, second by Darren Blankenship, to approve the minutes of December 19, 2016, carried unanimously.

3 Public Appearances for Non Agenda Items

None.

4 Agenda Review

Chair Potts called for a review of the agenda. No changes were made to the agenda.

5 Agenda Items

 Recommend approval of 2017 City of Fitchburg Bicycle and Pedestrian Plan to Fitchburg Common Council

Chair Potts opened public comment.

Sheryl Theis, 5823 Woods Edge Road, Fitchburg, stated verbally she was representing 20 of her neighbors, and that she was in opposition to the Plan draft. Theis submitted a memo to the Committee summarizing her and her

Public Open House/Workshops and Listening Sessions

Public Open House/Workshops and Listening Sessions provided an opportunity for members of the public to receive project information, express preferences, ask questions, and engage in discussion with other members of the public regarding issues of bicycling and walking in Fitchburg. Three Public Open House/Workshops were held for this Plan Update as well as a special meeting on sidewalks, hosted by Mayor Steve Arnold.

Below is a link to all of the video-recordings of BPAC meetings: http://factv.fitchburgwi.gov/Cablecast/public-site/index.html#/search?channel=3&query=bicycle%20and%20pedestrian

The following are summaries of the public open house workshops and listening sessions:

Open House Workshop #1, July 21st, 2017 McKee Farms Park

This workshop/open house was hosted by the City's consultant, Community Design Group and City staff, and focused on gathering general, preliminary feedback related to biking and walking in the City.

Open House Workshop #2, September 22nd, 2017 Fire House No. 1

This workshop/open house was hosted by the City's consultant, Community Design Group and City staff, and focused on presentation of major biking and pedestrian elements of the first draft of the Plan update. Major discussion topics and general sentiment of meeting attendees was strong opposition to installation of sidewalks in existing residential neighborhoods. It should be noted that that no specific policy recommendations related to installation of sidewalks in existing residential neighborhoods were proposed at the meeting, nor contained in the first draft of the Plan update.

Oct. 10th, 2017: Special Public Meeting RE: Sidewalks with Mayor Steve Arnold

This special meeting/listening session was hosted by City of Fitchburg Mayor Steve Arnold, and focused on various draft sidewalk policy recommendations, including identification of ten specific areas throughout the City in which sidewalk could potentially be installed. Major discussion topics and general sentiment of meeting attendees was strong opposition to the draft policy recommendations presented by the Mayor.

Open House Workshop #3, December 15th, 2017 Council Chambers, City Hall

The following pages contain agendas for these events.



Administrative Offices 5520 Lacy Road Fitchburg, WI 53711-5318 Phone: (608) 270-4200 Fax (608) 270-4275 www.fitchburgwi.gov

AGENDA

Update to City of Fitchburg Bicycle and Pedestrian Plan
Public Open House and Workshop
July 21, 2016
Kids Crossing Shelter, McKee Farms Park
6:00 – 8:00 PM

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a public open house and workshop on **Thursday July 21, 2016 at 6:00 PM**, at the Kids Crossing Shelter, McKee Farms Park, 2930 Chapel Valley Road, Fitchburg, WI 53711 for the purposes of:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

6:00 - 6:30 p.m. - Open House and Workshop - General Feedback Opportunities

6:30 - 7:00 p.m. - Presentation on Plan Update Project and Process - Community Design Group

7:00 - 8:00 p.m. - Open House and Workshop - General Feedback Opportunities

This public open house and workshop constitutes a meeting of the Bicycle and Pedestrian Advisory Committee, and other Committees and Commission, pursuant to State ex rel Badke v. Greendale Village Board, 173 Wis. 2d 553 (1993) and must be noticed as such although the Bicycle and Pedestrian Advisory Committee and other governing bodies will not take formal action, and all members may be unable to attend. This will allow the Committee and other bodies to gather information and be updated on matters, over which they have decision-making responsibilities.

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AGENDA

Bicycle And Pedestrian Plan Update Open House and Workshop September 22, 2016 6:00 PM

PLEASE TAKE NOTICE that the City of Fitchburg, Dane County, Wisconsin will hold a Bicycle and Pedestrian Plan Update Open House and Workshop on **Thursday, September 22, 2016 at 6:00 PM** in the Fitchburg Fire Station 1, 5791 Lacy Road, Fitchburg, WI 53711. A short presentation will be given at 6 p.m., with opportunities for to provide input and feedback on the Plan Update to follow. All interested parties are encouraged to attend.

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

This open house and workshop constitutes a meeting of the Fitchburg Bicycle and Pedestrian Advisory Committee, and other Committees and Commission, pursuant to State ex rel Badke v. Greendale Village Board, 173 Wis. 2d 553 (1993) and must be noticed as such although the Bicycle and Pedestrian Advisory Committee and other governing bodies will not take formal action, and all members may be unable to attend. This will allow the Committee and other bodies to gather information and be updated on matters, over which they have decision-making responsibilities.

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AGENDA

Public Meeting –
Sidewalks and the 2016 Update to the City's Bicycle and Pedestrian Plan
October 10, 2016
City Hall - Council Chambers
7:00 PM

PLEASE TAKE NOTICE that the City of Fitchburg, Dane County, Wisconsin and Mayor Steve Arnold will hold a public meeting on **Monday**, **October 10**, **2016 at 7:00 PM** in the Council Chambers of Fitchburg City Hall, 5520 Lacy Road, Fitchburg, WI 53711 for the purposes of discussing and gathering feedback on sidewalks as they relate to the 2016 update to the City's Bicycle and Pedestrian Plan.

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

This meeting constitutes a meeting of the Fitchburg Bicycle and Pedestrian Advisory Committee, and other Committees and Commission, pursuant to State ex rel Badke v. Greendale Village Board, 173 Wis. 2d 553 (1993) and must be noticed as such although the Bicycle and Pedestrian Advisory Committee and other governing bodies will not take formal action, and all members may be unable to attend. This will allow the Committee and other bodies to gather information and be updated on matters, over which they have decision-making responsibilities.

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AGENDA

Draft Review Public Meeting – 2016 Update to City of Fitchburg Bicycle and Pedestrian Plan

Bicycle And Pedestrian Advisory Committee
December 15, 2016
7:00 PM
Council Chambers, City Hall

PLEASE TAKE NOTICE that the Bicycle And Pedestrian Advisory Committee of the City of Fitchburg, Dane County, Wisconsin will hold a meeting on **Thursday**, **December 15**, **2016 at 7:00 PM** in the Council Chambers, City Hall, Fitchburg, WI 53711 for the purposes of presenting a draft of the Bicycle and Pedestrian Plan – 2016 Update to the public for review and comment, as follows:

(Note: Full coverage of this meeting is available through FACTv and Streaming Video, accessible on the city web site at http://factv.fitchburgwi.gov/Cablecast/Public/Main.aspx?ChannelID=3

- 1. 7:00 p.m. Overview of Plan Update Content and Process
- 2. Bicycle Content
- 3. 8:00 p.m. Overview of Plan Update Content and Process
- 4. Pedestrian Content
- Wrap-Up and Next Steps

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Alders Carol Poole, Jason Gonzalez, Dan Carpenter, Julia Arata-Fratta

Introduced by

Alder Carol Poole
Prepared by

Board of Public Works, Finance, TTC & PSHS Committees
Referred to

November 15, 2016 Date

RESOLUTION R-185-16

A RESOLUTION UPDATING AND EXTENDING RESOLUTION R-75-10, REGARDING THE CONSTRUCTION OF NEW SIDEWALKS AND SHARED USE PATHS IN EXISTING NEIGHBORHOODS

WHEREAS, Resolution R-75-10 was passed and adopted on August 24th, 2010 to suspend controversial sidewalk construction in existing neighborhoods until the 2008 Bicycle and Pedestrian Plan was reviewed, revised and re-adopted; and

WHEREAS, this review and re-adoption will be completed in 2017 causing R-75-10 to sunset, creating a renewed interest and concern among residents; and

WHEREAS, alternatives to sidewalks are identified in the Bicycle and Pedestrian Plan that can enhance the walkability of existing neighborhoods and address pedestrian safety issues; and

WHEREAS, residents in our existing neighborhoods that do not have sidewalks, have testified and demonstrated time and again that due to the cost of installation, continual maintenance, increased liability and detrimental impact on landscaping, grading, driveways and streetscapes they do not want sidewalks installed in their existing neighborhoods; and

WHEREAS, the installation of share multiuse paths that are separated from motor vehicle traffic create an even greater impact; and

WHEREAS, residents of Fitchburg have requested a resolution to this issue that they can trust, that is codified and is not just a plan,

NOW THEREFORE BE IT HEREBY RESOLVED that the existing neighborhoods are identified as shown on the attached map. And also include any existing development where sidewalks were not required when the development was platted, or subsequently when homes were built, and

NOW THEREFORE BE IT HEREBY RESOLVED that new sidewalks and shared multiuse paths will not be constructed in existing neighborhoods, on residential properties unless all of the following criteria are met:

- The Sidewalk or shared multi-use path has been requested by the neighborhood residents and/or property owners, or has been quantitatively documented as the only recourse to eliminate a hazardous condition; and
- 2. The installation of said sidewalks is agreed to by a minimum of 75% affected property owners.

Adopted this 24th day of January, 2017.

Patti Anderson, City Clerk

Stephen L. Arnold, Mayor

Mayor Arnold Introduced by

Planning Prepared by

Transportation & Transit Commission
Park Commission, Plan Commission,
Bicycle and Pedestrian Advisory Committee
Referred to

January 24, 2017 Date

RESOLUTION R-16-17

A RESOLUTION ADOPTING THE 2017 CITY OF FITCHBURG BICYCLE AND PEDESTRIAN PLAN

WHEREAS, the City of Fitchburg has long recognized the value of a comprehensive, diverse, and integrated transportation system, consisting of automobile, bicycle, and pedestrian elements, and adopted the 2008 City of Fitchburg Bicycle and Pedestrian Plan on July 22, 2008 (hereafter "2008 Plan") to continue to provide for safe, efficient, and cost-effective options for biking and walking in the City; and

WHEREAS, the City of Fitchburg Common Council approved \$15,000.00 in the 2016 City Budget to update the 2008 Plan, and a 14-member ad hoc City of Fitchburg Bicycle and Pedestrian Advisory Committee (hereafter "BPAC") was formed in 2015 to oversee the process of updating the 2008 Plan; and

WHEREAS, the City of Fitchburg hired Community Design Group, a community development and transportation planning consulting firm, in 2016 to prepare an update to the 2008 Plan, to be known as the 2017 City of Fitchburg Bicycle and Pedestrian (hereafter "2017 Plan"); and

WHEREAS, major components of the 2017 Plan development public engagement process included a public opinion survey, an online interactive "WikiMap", eight BPAC meetings including separate walking and biking "audits" and a public hearing, four open houses/workshops including one devoted specifically to issues related to new sidewalk installation, and presentation of a draft of the 2017 Plan to the City's Board of Public Works, Parks and Plan Commissions, Community and Economic Development Authority, and Transportation and Transit Committee; and

WHEREAS, the 2017 Plan reflects the prevailing sentiments gathered from the aforementioned public engagement process, and includes sound transportation planning principles and current trends, so as to continue to provide for safe, efficient, and cost-effective options for biking and walking in the City

NOW BE IT HEREBY RESOLVED, by the Fitchburg Common Council that it approves the 2017 City of Fitchburg Bicycle and Pedestrian Plan.

Adopted this 28th day of February, 2017.

Stoppen L Arnold Mayor

etti Anderson, City Clerk

Stephen L. Arnold, Mayor

Mayor Arnold Introduced by

Public Works
Prepared by

Council - direct referral Referred to

March 28, 2017 Date

RESOLUTION R-69-17

RESOLUTION TO AMEND THE PREVIOUSLY ADOPTED R-185-16 AND ADOPT THE 2017 CITY OF FITCHBURG BICYCLE AND PEDESTRIAN PLAN

WHEREAS, Council adopted Resolution R-185-16 which sets policy related to existing neighborhoods and the construction of new sidewalk or shared used paths within those existing neighborhoods; and

WHEREAS, Council adopted Resolution R-16-17 to approve the 2017 Bicycle and Pedestrian Plan, with an amendment to incorporate the language from Resolution R-185-16 into the Bike and Pedestrian Plan (Plan) to maintain consistency between the resolution and the Plan; and

WHEREAS, the first Now Therefore statement of Resolution R-185-16 includes a clause which is not consistent with Figure 3.5 of the Plan; and

WHEREAS, the Plan has been updated to include language from Resolution R-185-16, with one modification which removes the inconsistency between the R-185-16 language and Figure 3.5 of the Plan; and

WHEREAS, the language in Resolution R-185-16 should be amended to maintain this consistency;

NOW BE IT HEREBY RESOLVED, by the Fitchburg Common Council that it amends the first Now Therefore Be It Hereby Resolved clause of Resolution R-185-16 to the following:

"NOW THEREFORE BE IT HEREBY RESOLVED that the existing neighborhoods are identified as shown on the attached map (Figure 3.5 of the 2017 Bicycle and Pedestrian Plan)."

BE IT FURTHER RESOLVED, by the Fitchburg Common Council that it approves the 2017 City of Fitchburg Bicycle and Pedestrian Plan, as amended to incorporate the language from Resolution R-185-16.

Adopted this 28th day of March, 2017.

atti Anderson, City Clerk

StepHen L. Arnold, Mayor